

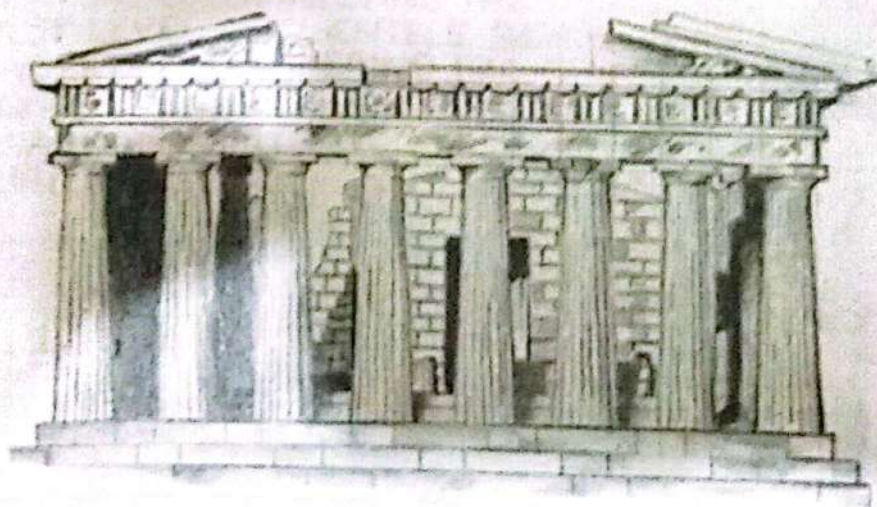
BICOL UNIVERSITY
INSTITUTE OF DESIGN AND ARCHITECTURE
EAST CAMPUS, LEGAZPI CITY
A.Y. 2024-2025, 2ND SEMESTER

HISTORY OF ARCHITECTURE 1

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JERARD KENT B. BIÑAS
BS ARCHITECTURE 1A

AR. ANA M. LORILLA, MS ARCH
PROFESSOR



BICOL UNIVERSITY

VISION

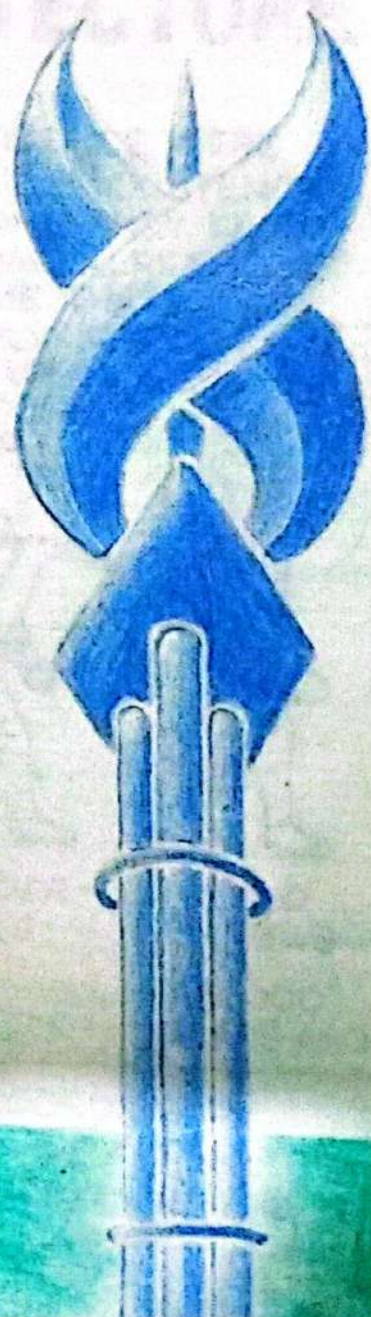
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BICOL UNIVERSITY COMMITS TO
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REQUIREMENTS.



1

PREHISTORIC ARCHITECTURE

LONG BEFORE WRITTEN PIECES OF EVIDENCE WERE FOUND BY ARCHAEOLOGISTS PROVING THE EXISTENCE OF HUMANS THOUSANDS OF YEARS AGO AND THEY LIVED THEIR LIVES BEFORE, ARCHITECTURE WAS ALREADY A THING IN PREHISTORY. A PERIOD OF TIME THAT SPANS FROM THE EVOLUTION OF SPECIES TO EARLY FORMS OF HUMAN ABOUT 2.5 MILLION YEARS AGO UP TO THE INVENTION OF WRITING AND LANGUAGE IN 3,000 B.C. E.

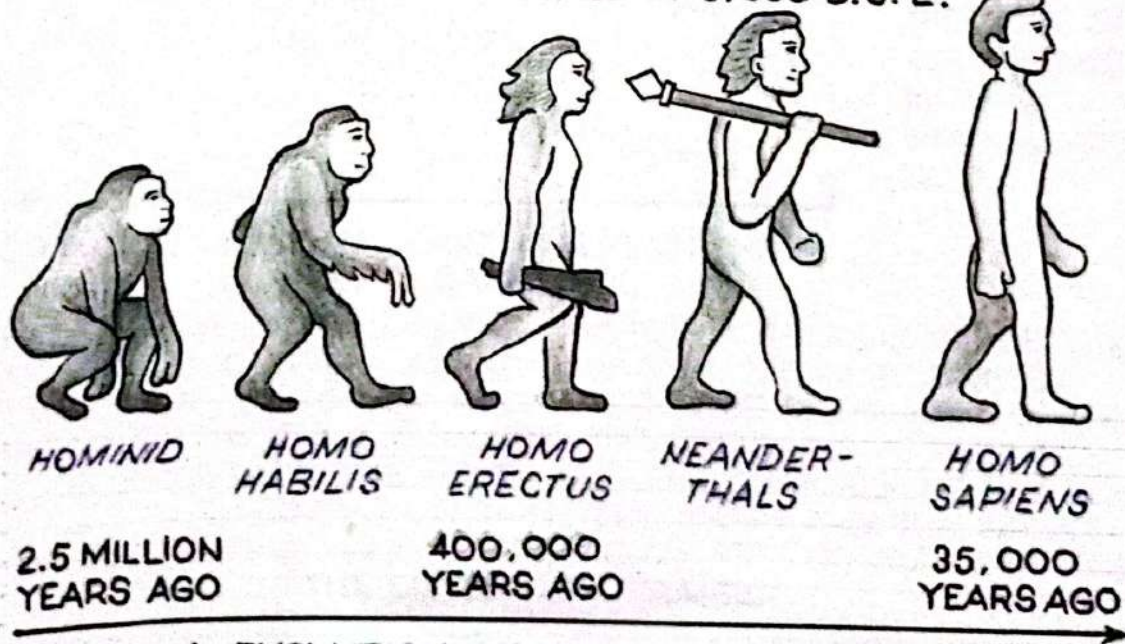


FIGURE 1: EVOLUTION OF HUMANS ACCORDING TO CHARLES DARWIN'S *THEORY OF EVOLUTION*.

ALONG WITH THIS EVOLUTION, EARLY HUMANS WERE ALSO ABLE TO DEVELOP THEIR CRITICAL THINKING AND PROBLEM SOLVING SKILLS—WHICH ARE ESSENTIAL FOR SURVIVAL—TO

THE POINT THAT THEY HAVE LEARNED HOW TO CONSTRUCT SHELTERS AND SETTLEMENTS WHICH ARE MADE FROM THE AVAILABLE MATERIALS IN NATURE.

LASCAUX CAVE MONTIGNAC, FRANCE

BEFORE HUMANS ADAPTED LIVING ON THEIR OWN MADE SETTLEMENTS AND HUTS, THEY ONCE LIVED ON CAVES AND MOUNTAIN OPENINGS. THE INFAMOUS LASCAUX CAVE IN FRANCE IS A STRONG EVIDENCE THAT HUMANS LIVED IN CAVES LONG BEFORE MIGRATING TO OTHER PLACES AND MOST IMPORTANTLY, LEARNING HOW TO CONSTRUCT HUTS.



FIGURE 2.1:
GEOGRAPHICAL
LOCATION OF
LASCAUX CAVE,
MONTIGNAC,
FRANCE

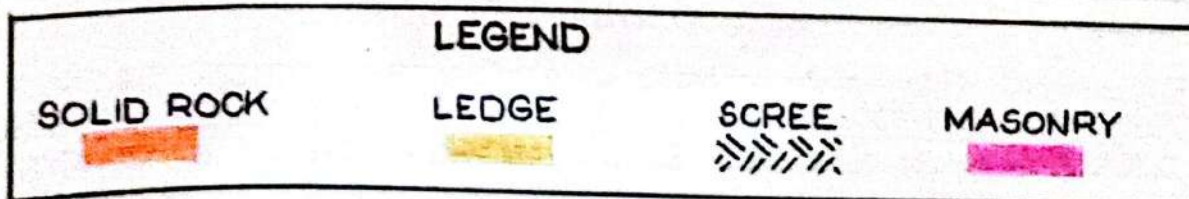
THE 22 000-YEAR-OLD CAVE PAINTINGS, HUMAN SKULLS, POTTERY, AND USED CHARCOAL SHOWCASES THE IDEA THAT HUMANS LEARNED THE FIRST AND BASIC SURVIVAL SKILLS SUCH AS COOKING, HUNTING, AND RECORDING DAILY HAPPENINGS THROUGH CAVE PAINTING.



• **CAVE PAINTING:** LOCATED AT THE "HALL OF BULL" PASSAGEWAY, SHOWING DEPICTIONS OF ANIMALS, COMMONLY MAMMOTS AND BULLS.

FIGURE 2.2 : LASCAUX CAVE INTERIOR; SHOWING CAVE PAINTINGS.

THE FLOOR PLAN SHOWS THE DIVISION OF AREAS INSIDE THE CAVE. THE ACCESSIBLE AREAS OF THE CAVE CAN BE DIVIDED ALONG THREE (3) MAJOR AXES: ENTRANCE AREA, HALL OF THE BULLS AND THE AXIAL GALLERY. THE SECOND AXIS INCLUDES THE PASSAGEWAY, THE NAVE, AND THE CHAMBER OF THE FEELINES. THE THIRD AXIS CONTAINS THE SHAFT AND THE GREAT FISSURE; BEYOND THIS, A LARGE QUANTITY OF SCREE MARKS THE OPENING OF THE SILTED-UP CHAMBER.



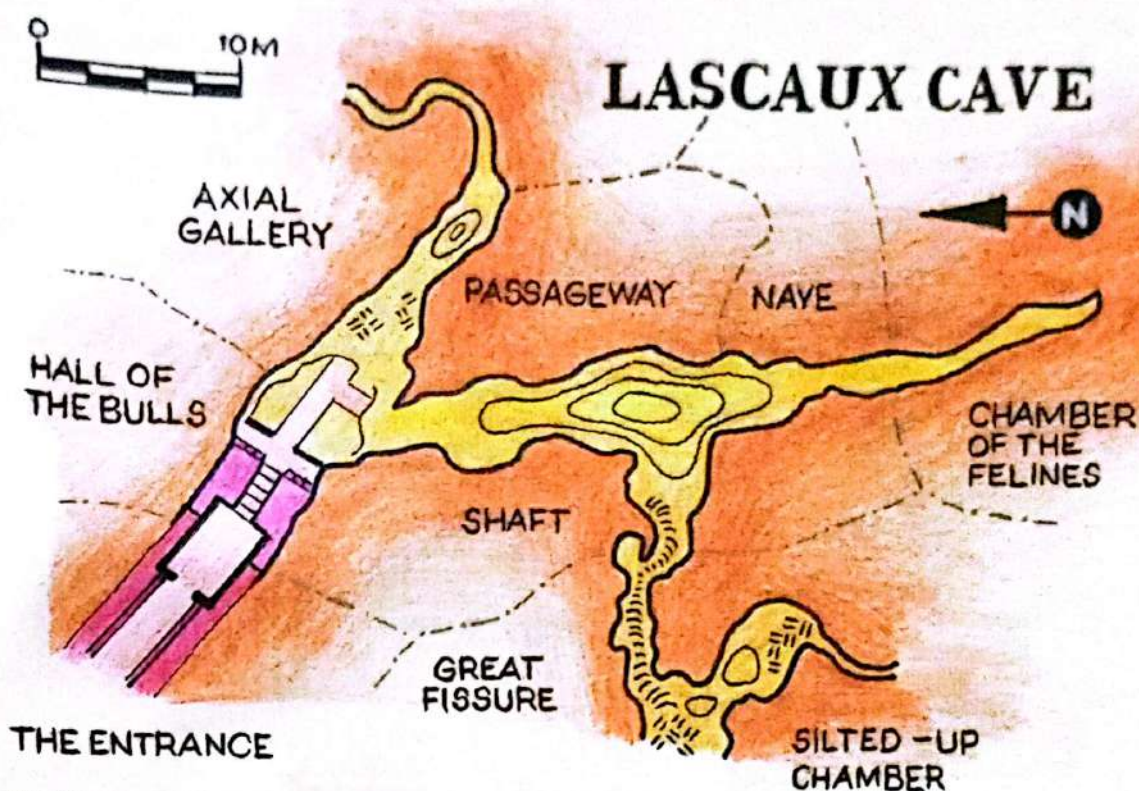


FIGURE 2.3: LASCAUX CAVE FLOOR PLAN

MAMMOTH BONE HUTS DNEPR REGION, UKRAINE

ONE OF THE EARLIEST DISCOVERIES THAT SUPPORTS PREHISTORIC ARCHITECTURE ARE THE REMAINS OF HUTS MADE FROM MAMMOTH BONES AND OTHER ANIMAL SKINS LOCATED IN THE WESTERN RUSSIAN PLAINS. (PRESENT-DAY UKRAINE) THAT IS KNOWN TO BE ESTABLISHED IN ABOUT 14,000 BCE.

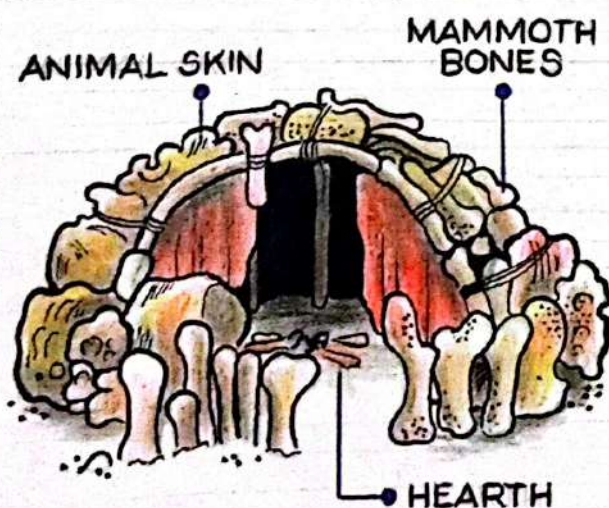


FIGURE 3.2: GEOGRAPHICAL LOCATION OF MAMMOTH BONE HUTS IN DNEPR REGION, UKRAINE.

FIGURE 3.1: RECONSTRUCTED MAMMOTH BONE HUT AS STUDIED BY ARCHAEOLOGISTS.

TYPICAL IN CIRCULAR AND OVAL SHAPE, MAMMOTH DWELLINGS ARE MADE OF STACKED MAMMOTH BONES, OFTEN ARRANGED ACCORDING TO SIZE. FOR INSTANCE, THE ELONGATED BONES WERE STUCK TO THE GROUND THAT SERVES AS BARRICADE OR

WALL. WHEREAS THE TUSKS AND RIB BONES WERE DESIGNATED FOR THE ROOF. THE INTERIOR CONSISTS OF HEARTH, OR SEVERAL, WHICH ARCHAEOLOGISTS CONCLUDED WERE USED IN COOKING. LARGE PITS CONTAINING OTHER ANIMAL BONES WERE ALSO FOUND. LASTLY, EXTERIOR HEARTHS WERE STUDIED TO BE USED IN BUTCHERING HUNTED ANIMALS AND MAKING TOOLS FOR HUNTING.

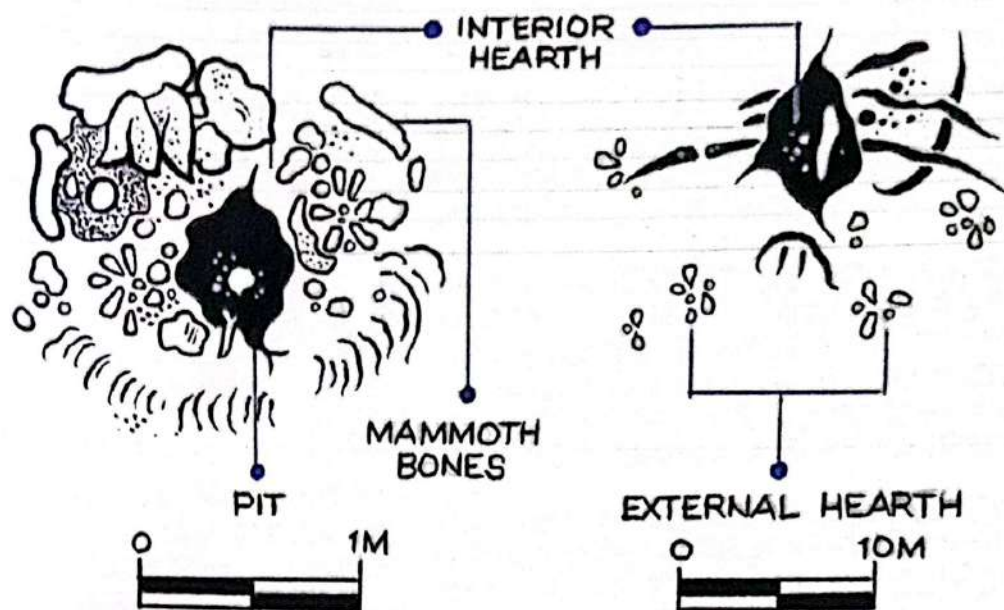


FIGURE 3.3: FLOOR PLAN OF THE REMAINS OF SOME MAMMOTH BONE HUTS IN DNEPR, UKRAINE.

THE TENT SIBERIA, RUSSIA

ANOTHER PRIMITIVE SHELTER IN PREHISTORIC TIMES IS THE TENT. UNLIKE THE MAMMOTH BONE HUTS, TENTS ARE HIGHLY "PORTABLE" DUE TO THE LIGHT MATERIALS USED IN IT. THE ANIMAL SKIN OR FUR SERVES AS THE WALL INSTEAD OF A HUT'S MAMMOTH BONES. ELONGATED ANIMAL BONES SERVED AS THE FRAMEWORK OF THE TENT. STUCK INTO THE GROUND AND STAND INCLINED AGAINST EACH OTHER, FORMING A CONICAL SHAPED TENT. THE ANIMAL SKIN WRAPS AROUND LEAVING THE CONE'S VERTEX EXPOSED IN ORDER TO SHED LIGHT INTO ITS INTERIOR AND FOR THE SMOKE COMING FROM THE HEARTH TO ESCAPE.



FIGURE 4.1: GEOGRAPHICAL LOCATION OF THE REMAINS OF TENTS IN SIBERIA, RUSSIA.



FIGURE 4.2 (SEE PAGE 4): ANATOMICAL ARCHITECTURE OF A PREHISTORIC TENT.

DUE TO THE "PORTABLE" FEATURES OF THE TENT. IT PROMOTES AN EASIER WAY FOR EARLY HUMANS TO BECOME NOMADIC; MIGRATING FROM ONE PLACE TO ANOTHER.

TIPI OR TEPEE NATIVE INDIANS OF NORTH AMERICA



THE TIPI (OR TEPEE) IS A CONICAL LODGE TENT THAT IS DISTINGUISHED FROM OTHER CONICAL TENTS BY THE SMOKE FLAPS AT THE TOP OF ITS STRUCTURE.

AS THE TEMPERATURE AT THE MOUNTAINS OF SIBERIA DROPS, FOOD AND SOURCE OF HEAT BECAME SCARCE. THAT IS WHY EARLY HUMANS TEND TO MIGRATE TO ANOTHER CONTINENT: NORTH AMERICA, CROSSING ALONG THE ICE BRIDGE BERINGIA MAKING IT TO CANADA.

FIGURE 5.1 : GEOGRAPHICAL REPRESENTATION OF THE MIGRATION OF EARLY HUMANS FROM SIBERIA TO NORTH AMERICA VIA ICE BRIDGE: BERINGIA.

TIPIS ARE TYPICALLY MADE FROM SEWN BUFFALO SKINS OVER A FRAMEWORK OF WOODEN POLES. (SEE FIGURE 5.2-3)

NATIVE INDIANS OF NORTH AMERICA ARE THE COMMON GROUP OF PEOPLE KNOWN FOR THIS BUILT SHELTER.

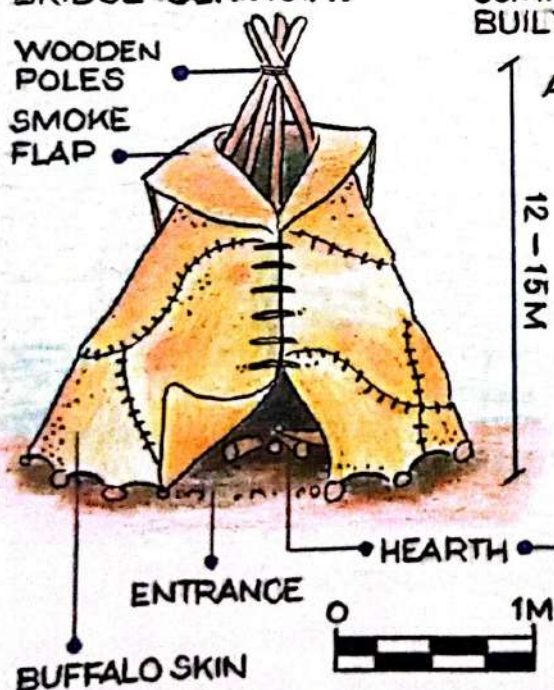


FIGURE 5.2 : FRONT ELEVATION OF A TIPI.

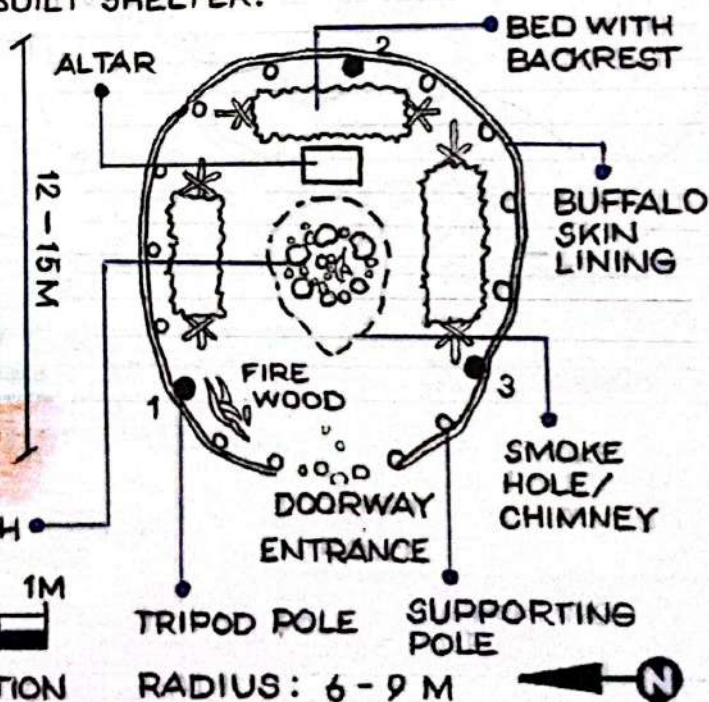


FIGURE 5.3 : FLOOR PLAN OF A TIPI.

BEEHIVE HUT KERRY, IRELAND

OLDEST KNOWN BEEHIVE HUTS WERE FOUND IN IRELAND AND SCOTLAND; BELIEVED TO BE ABOUT 5,000 YEARS OLD. THESE DWELLINGS ARE MADE BY STACKING STONES OF COMMON SHAPE AND SIZE INTO A HEMISPHERICAL DOME HUT.



FIGURE 6.1: GEOGRAPHIC LOCATION OF BEEHIVE HUT FOUND IN SCOTLAND, UK AND KERRY, IRELAND.

FIGURE 6.2: BEEHIVE HUT IN KERRY, IRELAND.



THE TERM "BEEHIVE" WAS—OBVIOUSLY—TAKEN FROM ITS CLOSE RESEMBLANCE TO A STRAW BEEHIVE

THE FLOOR PLAN ON FIGURE 6.3 SHOWS THE PLAN OF A STONE HUT SETTLEMENT IN IRELAND. STONE WALLS WERE BUILT TO PROTECT THE HUTS FROM INTRUDERS.

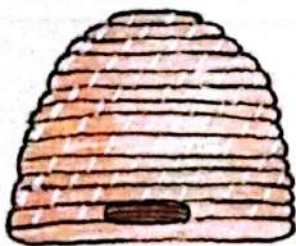


FIGURE 6.4: A STRAW BEEHIVE.

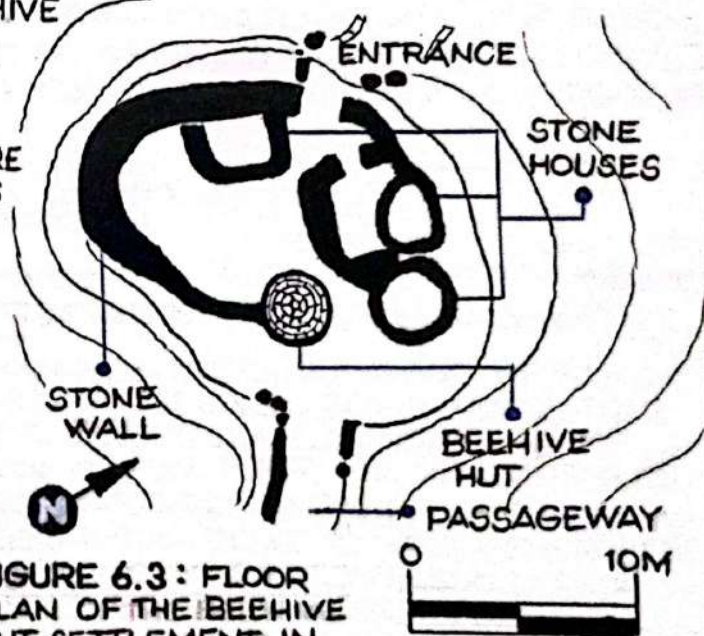


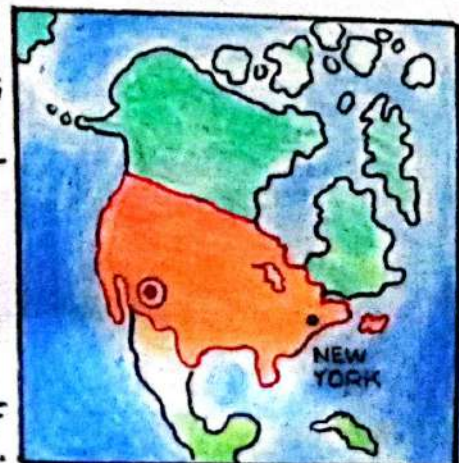
FIGURE 6.3: FLOOR PLAN OF THE BEEHIVE HUT SETTLEMENT IN KERRY, IRELAND.

HOGAN THE NAVAJO PEOPLE NORTH AMERICA

HOGANS ARE THE PRIMARY HUTS OF THE NAVAJO PEOPLE, A NATIVE TRIBE SETTLING IN THE SOUTHWEST REGION OF NORTH AMERICA (PRESENT DAY NEW MEXICO, UTAH, AND, ARIZONA.)

THESE HUTS, UNLIKE BEEHIVE HUTS ARE MADE OUT OF MUD AND CLAY, SUPPORTED BY LOGS AND WOODEN FRAMES. (SEE FIGURE 7.2-3)

FIGURE 7.1: GEOGRAPHICAL LOCATION OF NAVAJO SETTLEMENTS IN NORTH AMERICA.



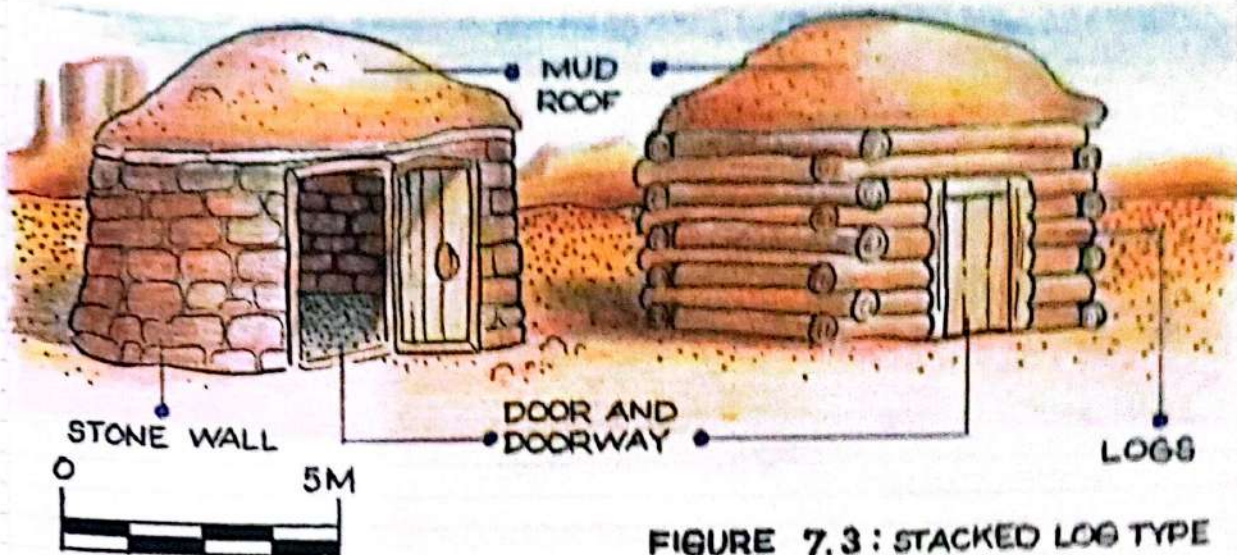


FIGURE 7.2: STONE WALL TYPE HOGAN.

FIGURE 7.3: STACKED LOG TYPE HOGAN.

SHOWN IN FIGURES 7.2 AND 7.3 ARE TWO COMMON STYLES OF BUILDING A HOGAN. ONE IS A STONE-WALLED HOGAN, WITH SAND-STONE WALLS AND A MUD ROOF, WHEREAS IN FIGURE 7.3, USES STACKED UP LOGS FORMING ITS FOUR WALLS AND A MUD ROOF AS WELL.

WIGWAM EASTERN CANADA NORTH AMERICA

A DOME OR CONE-SHAPED HOUSE THAT WERE ONCE USED BY INDIGENOUS GROUPS SETTLING IN PRESENT-DAY EASTERN CANADA AND U.S.



FIGURE 8.1: GEOGRAPHICAL LOCATION OF WIGWAM SETTLEMENTS IN EASTERN CANADA, NORTH AMERICA.

WIGWAMS ARE BUILT USING THE FOLLOWING MATERIALS: WOODEN POLES, TREE BARK, DRIED LEAVES, RUSH MATS, OR ANIMAL SKIN. FIRST, THE WOODEN POLES ARE PUNCTURED TO THE GROUND AND BENT INTO A DOME-SHAPED FRAMEWORK. THE MATERIALS FOR WALLS AND ROOF ARE TYPICALLY TREE BARK, RUSH MATS, AND ANIMAL SKIN.

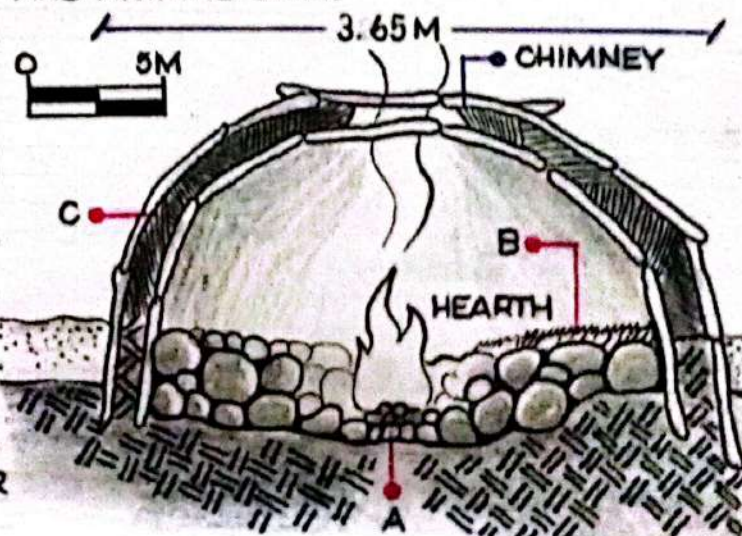


FIGURE 8.2: SECTION OF A WIGWAM.

- THE FIRE IS BUILT IN A RECESS IN THE ROCKS WHICH RADIATE STORED HEAT AFTER THE FIRE DIES OUT.
- THE FLOOR IS CEDAR OR BALSAM BOUGHS, COVERED WITH RUSH MATS, FURS, AND RUGS.

C. OUTER FRAME IS BUILT SIX (6) INCHES (15.24 CM) FROM THE INNER FRAME. THE SPACE IS USUALLY STUFFED WITH SWAMP MOSS.



FIGURE 8.3 : CONSTRUCTION AND MODEL OF A WIGWAM.

IGLOO

ALASKA, U. S. A. ; GREENLAND, DENMARK

ANOTHER BRICK-MADE HUT INTRODUCED BY THE ESKIMOS AND INUIT FAMILIES. IGLOOS ARE DOME-SHAPED HUTS MADE OF ICE AND HARDENED SNOW CALLED *PUKAANGAJUG*.

PEOPLE THAT LIVED FAR NORTH POLE, PLACES SUCH AS ALASKA, THE CANADIAN ARCHIPELAGO, AND GREENLAND USE IGLOO HUTS DURING WINTER TO EASE OFF THE COLD. DURING WARMER SEASONS, THEY USE AN ALTERNATIVE; A KIND OF TENT CALLED *TUPIQ*, WHICH IS MADE OUT OF SEAL OR CARIBOU SKIN.

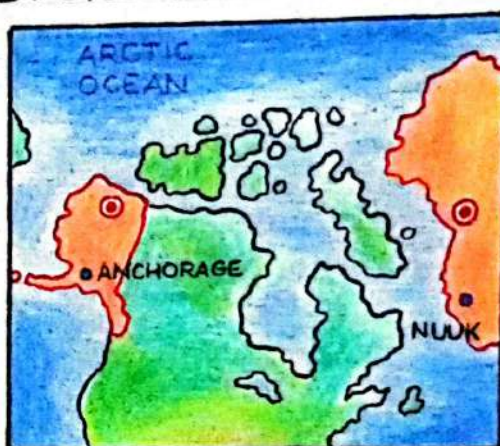


FIGURE 9.1 : GEOGRAPHICAL LOCATION OF IGLOO SETTLEMENTS IN ALASKA, U.S.A., AND IN GREENLAND DENMARK.

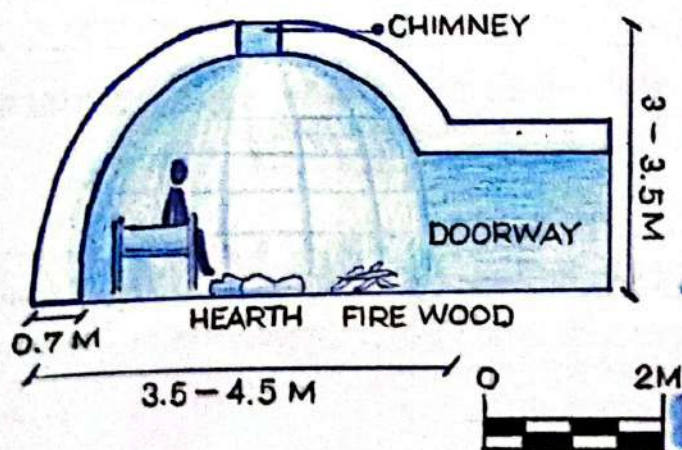


FIGURE 9.2 : CROSS SECTION OF AN IGLOO.



FIGURE 9.3 : AN IGLOO.

THE SUCCEEDING TOPIC IN THIS SECTION TACKLES THE DIFFERENT RELIGIOUS STRUCTURES THAT PEOPLE IN PREHISTORIC TIME WORSHIP. STARTING FROM THE MEGALITH STRUCTURES SUCH AS THE STONEHENGE UP TO THE TUMULUS STRUCTURE.

A MEGALITH REFERS TO A LARGE STONE STRUCTURE FOUND ACROSS FROM EUROPE TO ASIA, USED AS SEPULCHRAL AND NON-SEPULCHRAL MONUMENTS BY ANCIENT COMMUNITIES FROM THE LATE NEOLITHIC TO IRON AGE (10 000 B.C.E. — 2 000 B.C.E.)

MENHIR de KERLOAS PLOUARZEL, FRANCE

KNOWN AS THE TALLEST REMAINING MENHIRS IN EUROPE; STANDING AT ABOUT 10 METERS.

MENHIRS ARE PREHISTORIC MEGALITHS USUALLY A SINGLE STONE STANDING UPRIGHT. SOME MENHIRS ARE FOUND STANDING WITH A GROUP IN A MANNER OF PARALLEL ROWS.

MENHIRS MAY HAVE BEEN USED FOR DRUIDIC SACRIFICES RITES, AS MARKERS, OR EARLY CALENDARS.



FIGURE 10. 1: GEOGRAPHICAL LOCATION OF MENHIR DE KERLOAS IN PLOUARZEL, FRANCE.

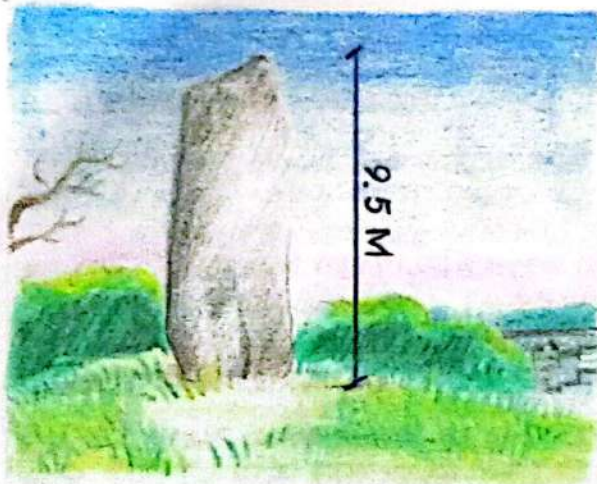


FIGURE 10. 2: MENHIR DE KERLOAS, PLOUARZEL, FRANCE.



FIGURE 10. 3: CARNAC MENHIR MEGALITHS, CARNAC FRANCE (200 KM FROM PLOUARZEL)

DOLMEN DONEGAL COUNTY, IRELAND



DOLMEN IS A TYPE OF MEGALITH GENERALLY CONSISTS OF TWO UPRIGHT STONES AND A HORIZONTAL STONE SLAB OR CAPSTONE ABOVE. THOUGH, DOLMENS ARE CLASSIFIED INTO TWO VARIATIONS: COVE AND TRILITHON. A COVE DOLMEN IS DESCRIBED AS THREE STANDING STONES, TWO ON THE SIDES, AND ONE AT THE BACK. WHEREAS A TRILITHON DOLMEN CONSISTING TWO UPRIGHT STONES SUPPORTING A HORIZONTAL LINTEL. (SEE FIGURE 11.3)

FIGURE 11. 1: GEOGRAPHICAL LOCATION OF KILCLOONEY DOLMEN IN DONEGAL IRELAND.

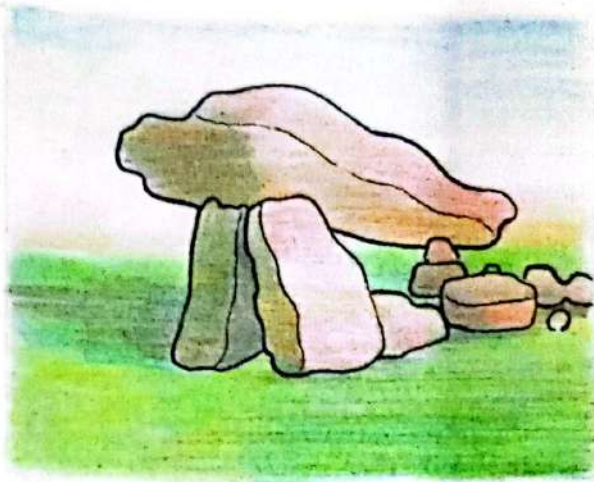


FIGURE 11.2: THE KILCLOONY DOLMEN IN DONEGAL, IRELAND.

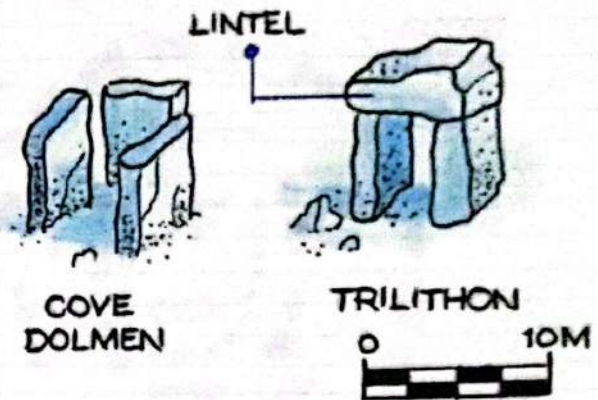


FIGURE 11.3: TYPES OF DOLMEN STRUCTURES.

ALMENDRES CROMLECH EVORA, PORTUGAL

CROMLECH IS A TYPE OF MEGALITH STRUCTURE THAT IS DESCRIBED AS A GROUP OF STONES STANDING UPRIGHT, ARRANGED IN A CIRCULAR MANNER.

THE *CROMLEQUE NA HEDRADE DOS ALMENDRES* IS KNOWN AS THE LARGEST EXISTING CROMLECH IN THE IBERIAN PENINSULA. IT IS COMPOSED OF SEVERAL MENHIRS ARRANGED IN A CIRCULAR FORM. (SEE FIGURE 12.2)

CROMLECHS MAY HAVE BEEN BUILT FOR TOMBS FOR BURYING THE DEAD, AND A MEETING PLACE FOR COMMUNITY EVENTS OR RITUALS.



FIGURE 12.1: GEOGRAPHICAL LOCATION OF ALMENDRES CROMLECH IN EVORA, PORTUGAL.

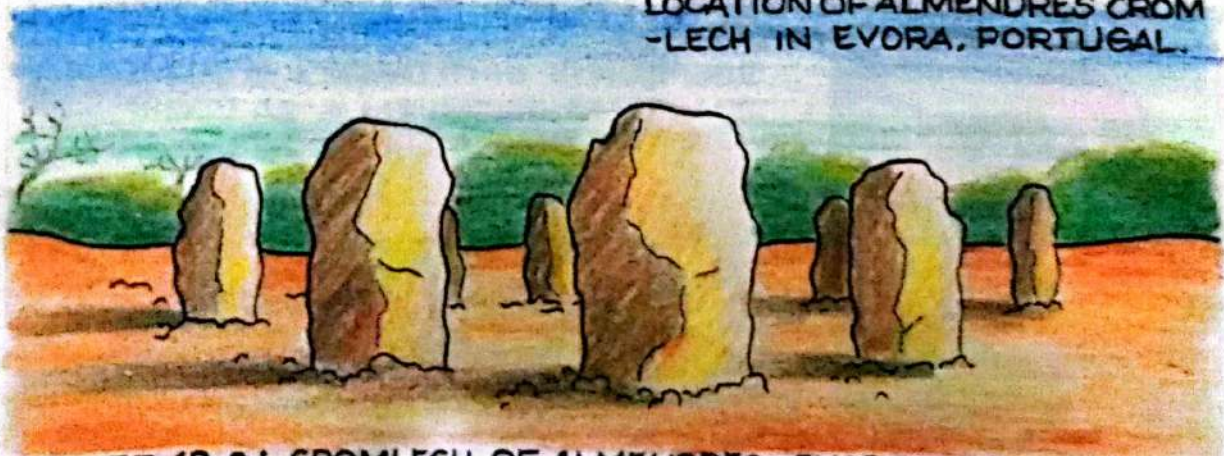


FIGURE 12.2: CROMLECH OF ALMENDRES, EVORA, PORTUGAL

STONEHENGE SALISBURY PLAIN, WILTSHIRE, ENGLAND

THE STONEHENGE IS ONE OF THE FAMOUS MEGALITHIC MONUMENT KNOWN TO BE BUILT IN THE PREHISTORIC TIMES. IT IS A MONUMENT COMPOSED OF FOUR CONCENTRIC RINGS OF TRILITHONS AND MENHIRS



FIGURE 13.1: GEOGRAPHICAL LOCATION OF STONEHENG IN SALISBURY PLAIN, WILTSHIRE, ENGLAND

ARCHAEOLOGISTS BELIEVED THAT A CERTAIN SUNCULT BUILT THE STONEHENG. WHICH MAY HAVE BEEN USED FOR RITUALS AND EVEN FOR CALCULATING AND PREDICTING ASTRONOMICAL EVENTS.

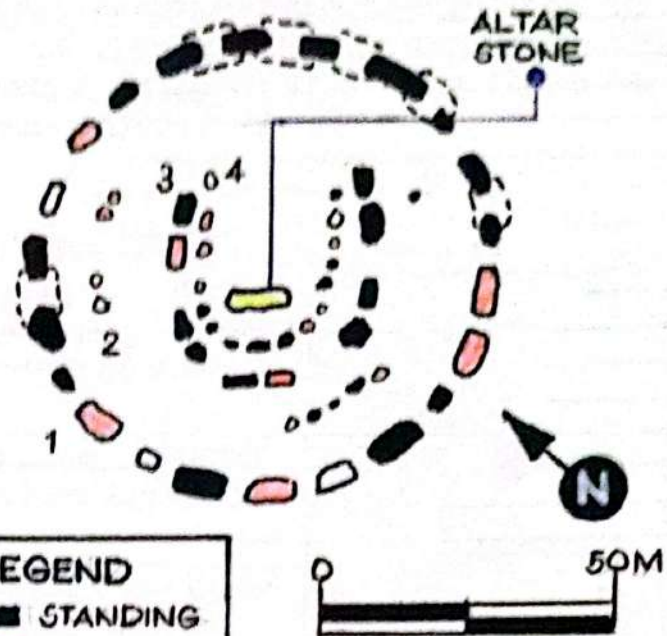


FIGURE 13.2: FLOOR PLAN OF STONEHENG.



FIGURE 13.3: THE STONEHENG.

TUMULUS OF BOUGON LES CHIRONS, FRANCE

A TUMULUS IS A MEGALITHIC STRUCTURE DESCRIBED AS A MOUND OF EARTH AND STONES RAISED OVER A GRAVE OR GRAVES.



FIGURE 14.1: TUMULUS A, FOUND IN BOUGON, DEUX-SÈVRES, FRANCE



FIGURE 14.2: GEOGRAPHIC LOCATION OF TUMULUS IN BOUGON, DEUX-SÈVRES, FRANCE

A TUMULUS IS ALSO KNOWN AS A BARROW.

OVER GENERATIONS, COMMUNITIES IN PREHISTORIC TIMES HAVE DEVELOPED SIGNIFICANTLY AS TO BE CALLED THE **WORLD'S FIRST CITIES**. BELOW DISCUSSES SOME OF THE **EARLY CITIES** TO EXIST IN A TIMELINE WHERE WRITTEN LANGUAGE WAS NOT YET PRESENT.

JÉRICHO WEST BANK, PALESTINE

AN 11 000-YEAR-OLD NEOLITHIC CITY IN THE NATION OF PALESTINE, JÉRICHO IS THE OLDEST KNOWN CONTINUALLY INHABITED CITY IN THE WORLD.

A CITY LOCATED AT THE TOP OF A HILL WHERE PEOPLE OF A POPULATION NOT GREATER THAN 1000 LIVED.

CIRCULAR DWELLINGS WERE BUILT OF CLAY AND STRAW BRICKS LEFT TO DRY IN THE SUN WHICH WERE PLASTERED TOGETHER WITH A MUD MORTAR.



FIGURE 15.1: GEOGRAPHIC LOCATION OF THE CITY OF JÉRICHO IN WEST BANK, PALESTINE.

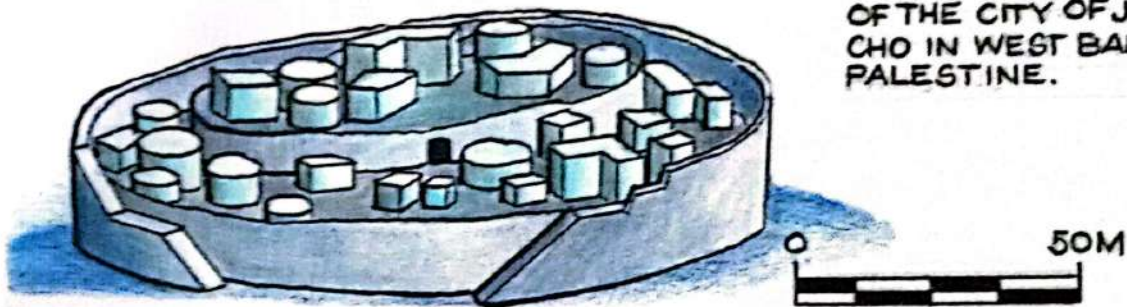


FIGURE 15.2: CITY OF JERICHO.

ÇATALHÖYÜK KONYA, TÜRKİYE

AN ANCIENT CITY SITUATED IN ANATOLIA (PRESENT DAY TÜRKİYE) THAT IS KNOWN AS THE LARGEST WELL-PRESERVED NEOLITHIC CITY IN THE WORLD.



FIGURE 16.1: GEOGRAPHICAL LOCATION OF ÇATALHÖYÜK, TÜRKİYE.

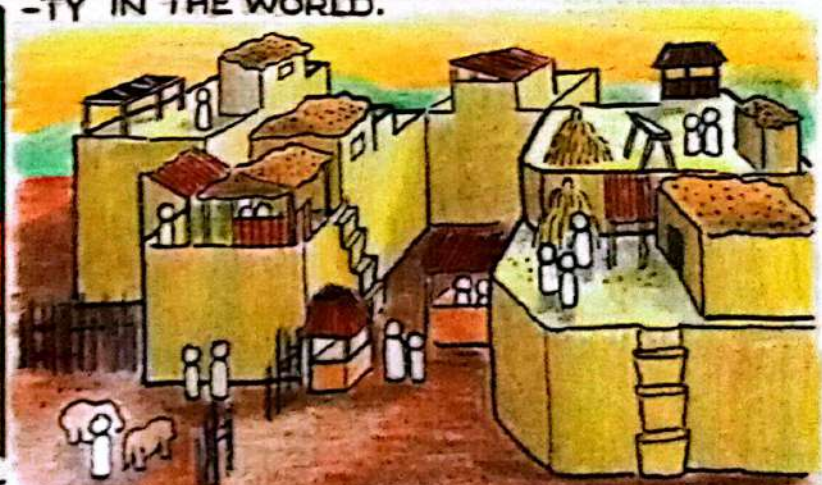


FIGURE 16.2: ÇATALHÖYÜK: DWELLINGS IN THE CITY.

HOUSES WERE ROUGHLY RECTANGULAR AND CLOSELY BUILT TOGETHER WITH NO STREETS IN BETWEEN. INSTEAD, PEOPLE MOVED AROUND ON ROOFS AND ACCESSED THEIR HOMES DOWN A WOODEN LADDER VIA AN OPENING IN THE CEILING. (SEE FIGURE 16.3)

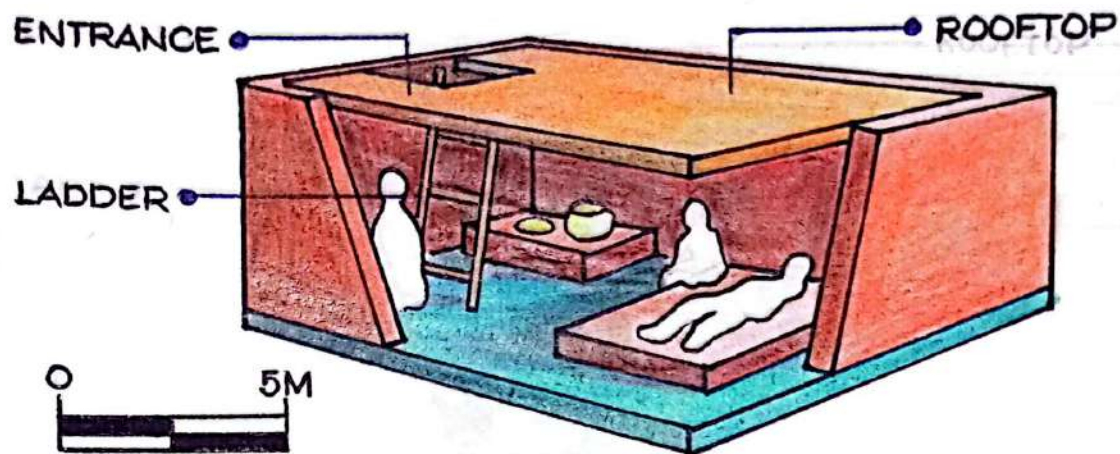


FIGURE 16.3: TYPICAL HOUSE LAYOUT OF A DWELLING IN ÇATALHÖYÜK.

2

WEST ASIATIC ARCHITECTURE

THE BEGINNING OF HISTORIC ERA COMMENCES IN 3500 B.C.E., TOGETHER WITH THE DEVELOPMENT OF THE EARLY WRITING SYSTEM KNOWN AS CUNEIFORM, WHICH HAS ORIGINATED FROM AN ANCIENT CIVILIZATION IN WEST ASIA: THE ANCIENT MESOPOTAMIA.

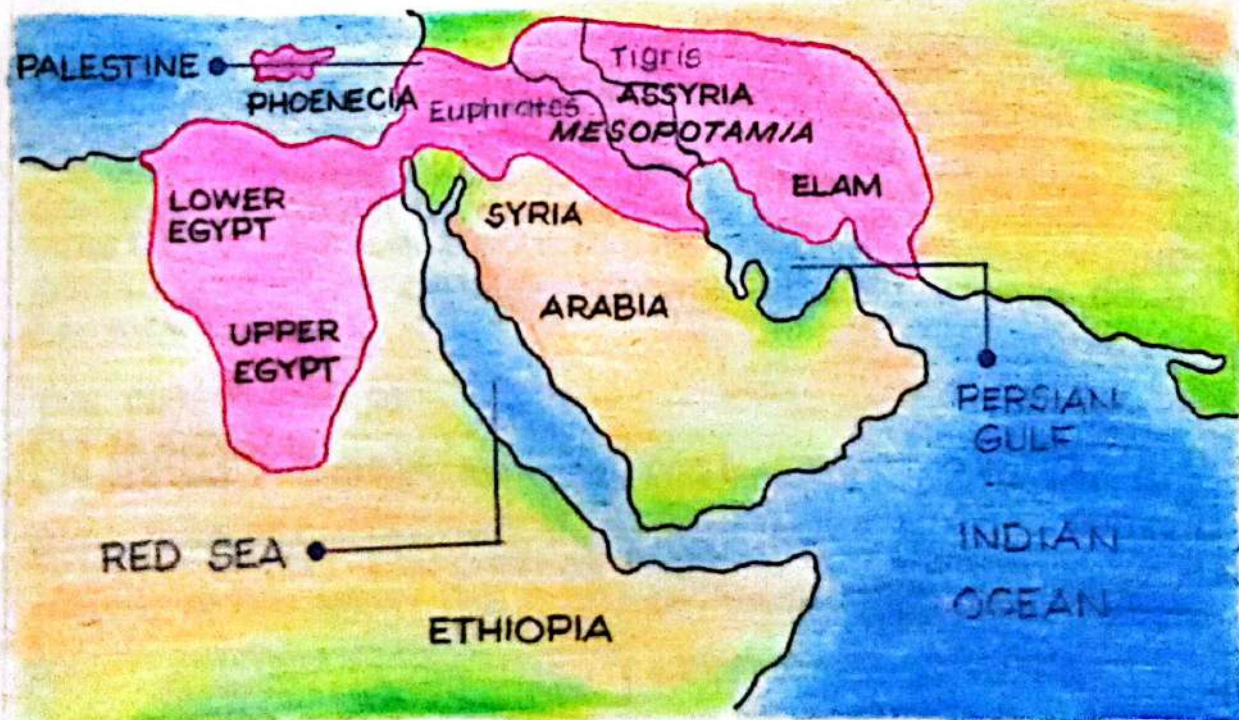


FIGURE 17 : MAP OF THE ANCIENT MESOPOTAMIA IN THE FERTILE CRESCENT; SHOWING THE FIRST EMPIRES IN THE REGION (1000 – 800 B. C. E)

THE WORD "MESOPOTAMIA" LITERALLY MEANS "LAND BETWEEN TWO RIVERS", A FERTILE LAND BETWEEN TWO RIVERS: TIGRIS AND EUPHRATES, FLOWING THROUGH THE GULF OF PERSIA. THIS REGION IS ALSO CALLED THE FERTILE CRESCENT DUE TO THE

CRESCENT SHAPE OF FERTILE LAND THAT IS SUFFICIENT TO SUPPORT A LIVING. LASTLY, THE MESOPOTAMIAN REGION IS KNOWN TODAY AS THE COUNTRY OF IRAQ.

COMMUNITIES IN ANCIENT MESOPOTAMIA UPGRADED TO CIVILIZATIONS OF CITY-ESTATES, WITH POPULATION OF THOUSANDS TO TEN THOUSANDS. IN THE CONTEXT OF ARCHITECTURE, THESE CITY-ESTATES ARE SURROUNDED BY A WALL. MOREOVER, A LARGE TEMPLE DOMINATES EACH CITY-ESTATE. THESE TEMPLES HAVE FUNCTIONAL COMPARTMENTS: FOR INSTANCE, THE TOP FLOOR IS DESIGNATED FOR WORSHIPPING THEIR GODS, THE LOWER FLOORS ARE SCHOOLS FOR SCRIBES, THEN THE GROUND FLOOR IS DESIGNATED FOR MARKETS AND TRADING.

SOCIAL CLASS AND DEMOGRAPHY HAS ALSO BEEN DEVELOPED IN EACH CITY-ESTATE. KINGS AND PRIESTS BELONG TO THE HIGHEST AND MOST RESPECTED CLASS, COMES AFTER ARE THE SCHOLARS AND SCRIBES, THE SOLDIERS, AND THE THIRD CLASS ARE THE CRAFTSMEN AND FARMERS.

IN TERMS OF RELIGION, EACH CITY-ESTATE WORSHIP THEIR OWN LIVING GODS FOR PROTECTION, GOOD HARVEST, AND SUCCESSFUL CONQUERING OF NEARBY LANDS.

THE GEOGRAPHY OF ANCIENT MESOPOTAMIA DOES NOT ONLY REVOLVE AROUND THE FERTILE LAND BETWEEN TWO RIVERS. MARSHLANDS NEAR THESE BODIES OF WATER HELPS GROW TREES THAT PRODUCES GOOD WOOD QUALITY. TRADING OF METAL AND WOOD ARE MAINSTREAM OF THE MARKET, USED FOR MAKING TOOLS AND HOUSES.

THE MESOPOTAMIAN REGION IS SURROUNDED BY DESERTS TO THE SOUTH AND EAST (ARABIA AND PERSIA), PLATEAUX TO THE NORTH (ANATOLIA AND GEORGIA), AND THE MEDITERRANEAN SEA TO THE WEST.

THE ARCHITECTURAL CHARACTER, WHICH REFERS TO THE METHOD, CONTEXT OR MANNER OF CONSTRUCTING BUILDINGS IN MESOPOTAMIA USES READILY AVAILABLE MATERIALS (CLAY, SOIL, REEDS, RUSHES). BRICKS ARE MADE OF MUD AND CHOPPED STRAW; SUN-DRIED OR KILN-FIRED.

THE CIVILIZATION OF

SUMER (CIRCA 5000—2000 B.C.E.)

SUMERIAN ARCHITECTURE IS CHARACTERIZED BY MONUMENTAL TEMPLE OF SUN-DRIED BRICK FACED WITH BURNT OR GLAZED BRICK, OFTEN UPON THE RUINS OF THEIR PREDECESSORS.



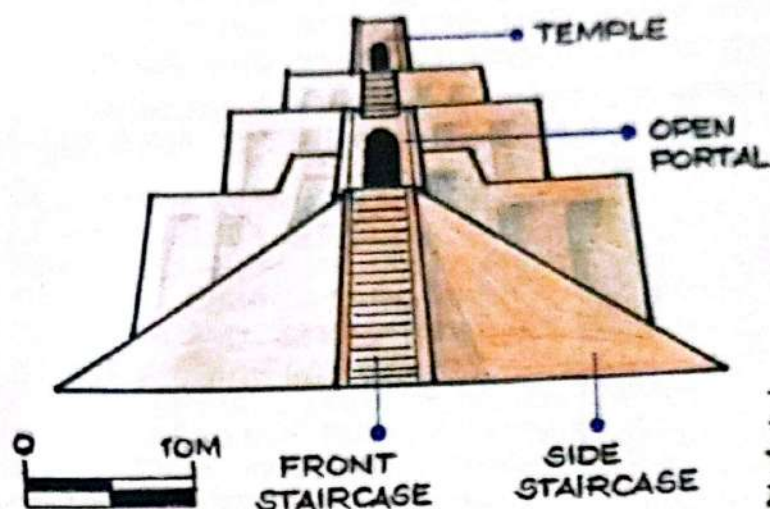
LEGEND:

- SUMERIAN TERRITORY
- - - BORDER OF PRESENT-DAY IRAQ

FIGURE 18.1: REFERENCE MAP OF THE SUMERIAN CIVILIZATION WITH RESPECT TO THE BORDER OF PRESENT DAY IRAQ.

ANU ZIGGURAT Uruk, SUMER (IRAQ)

A ZIGGURAT IS A MASSIVE TYPE OF STRUCTURE INTRODUCED BY SUMERIANS THAT IS A FORM OF TERRACED COMPOUND OF SUCCESSIVELY RECE-
DING STORIES OR LEVELS.



IT IS MADE OUT OF MUD BRICKS FROM DIRT MIXED WITH WATER AND STRAW. THE MUD WAS POURED INTO WOODEN MOLDS AND LEFT TO DRY IN THE SUN OR BAKED IN KILNS.

THE SUMERIANS BELIEVED THAT THE GODS LIVE IN THE TEMPLES AT THE TOP OF THE ZIGGURATS. ONLY PRIESTS AND HIGHLY-RESPECTED INDIVIDUALS CAN ENTER THE TEMPLE WHERE THEY PERFORM RITUALS AND CE-
-REMONIES.

FIGURE 18.2: THE GREAT ZIGGURAT OF UR, CITY OF UR, SUMER (IRAQ)

STATUS: PRESENT; SIGNIFICANT PARTS REMAIN.

ASIDE FROM THE TEMPLE, THE OTHER LEVELS SERVED AS SCHOOLS FOR SCRIBES AND MARKET FOR TRADING.

THE LEVELS OF ZIGGURATS RANGE FROM 2-7 WHICH CAN BE ACCESSED THROUGH THE MAIN OR FRONT STAIRCASE AND THE SIDE STAIRCASES.

THE FOUR CORNERS OF A ZIGGURAT WERE ORIENTED TOWARDS THE CAR-DINAL POINTS.

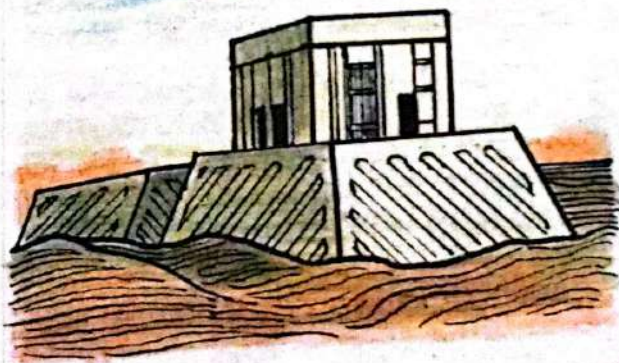


FIGURE 18.3: RESTORED WESTERN VIEWPOINT OF THE ANU ZIGGURAT AND THE WHITE TEMPLE, CITY OF URUK, SUMER (IRAQ)

STATUS: PRESENT BUT SEVERAL PARTS ARE THE REMAINS OF A LARGER ORIGINAL PART.

ESTABLISHED:

ZIGGURAT : CIRCA 4000 B.C.E.
WHITE TEMPLE : CIRCA 3500 B.C.E.

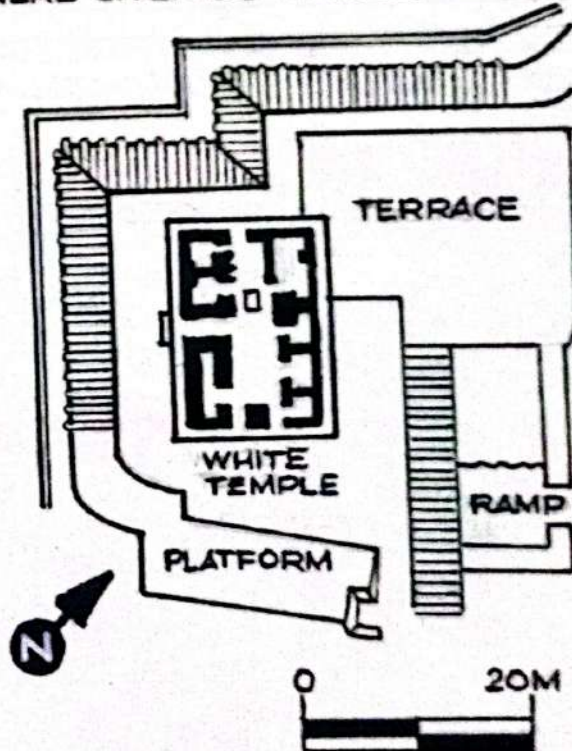


FIGURE 18.4: FLOOR PLAN OF THE ANU ZIGGURAT AND THE WHITE TEMPLE IN THE CITY OF URUK, SUMER (IRAQ)

THE EMPIRE OF BABYLON (2300 — 540 B.C.E.)

BABYLONIAN ARCHITECTURE WAS CHARACTERIZED BY MUD BRICK CONSTRUCTION. STRUCTURE HAD WALLS ARTICULATED BY PILASTERS, RECESSES, AND SOMETIMES FACED WITH BURNT AND GLAZED BRICK. BABYLONIAN PALACES AND TEMPLES WERE DECORATED WITH ENAMELED BRICK FRIEZES OF BULLS AND LIONS.

BEING ONE OF THE GLORIOUS AND DOMINANT EMPIRES OF THE ANCIENT TIMES, SOME STRUCTURES FROM THE BABYLONIAN EMPIRE EVEN MADE IT TO THE RECORD: *SEVEN WONDERS OF THE ANCIENT WORLD*. UNFORTUNATELY, SEVERAL STRUCTURES ON THE LIST DID NOT MAKE IT TO THE PRESENT DUE TO OLDNESS, CHAOTIC WARS, AND NATURAL CAUSES.



THE EMPIRE HELD TWO ERAS OF THEIR REIGN. THE OLD BABYLONIAN EMPIRE ROSE IN CIRCA 2000—1600 B.C.E., FOUNDED BY EMPERORS HAMMURABI AND NEBUCHADNEZZAR I. WHEREAS THE NEO-BABYLONIAN EMPIRE ROSE IN CIRCA 1200—540 B.C.E. UNDER THE RULING OF THE ASSYRIANS.

LEGEND:

- BABYLONIAN TERRITORY
- BORDER OF PRESENT-DAY IRAQ

FIGURE 19: REFERENCE MAP OF THE BABYLONIAN EMPIRE WITH RESPECT TO THE BORDER OF PRESENT-DAY IRAQ.

TOWER OF BABEL BABIL, BABYLON (IRAQ)

BIBLICAL SCRIPTURES STATED THAT THIS TOWER WAS BUILT AROUND 800—600 B.C.E. BY KING NEBUCHADNEZZAR II (NEO-BABYLON) TO RIVAL HEAVEN. (GENESIS 11: 1—9)

A MYTHICAL BABYLONIAN STRUCTURE THAT MAY HAVE BEEN STOOD ABOUT 300 FEET HIGH WAS BUILT IN THE TESTIFICATION THAT HEAVEN REALLY EXISTS.

BIBLICALLY SPEAKING, THE LABORERS OF THE TOWER SUDDENLY STOPPED THE CONSTRUCTION DUE TO MISCOMMUNICATION AS GOD PUNISHED THEM OF EMBODYING DIFFERENT LANGUAGES FOR RIVALING THE HEAVEN.

OTHER ARTICLES STATED THAT THE TOWER OF BABEL SERVED AS A TEMPLE FOR WORSHIPPING MARDUK, THE GOD OF THE CITY OF BABIL, BABYLON.

STATUS: MISSING. ARCHAEOLOGISTS STILL RELY ON



FIGURE 20: THE TOWER OF BABEL REIMAGINED ACCORDING TO BIBLICAL SCRIPTURES.

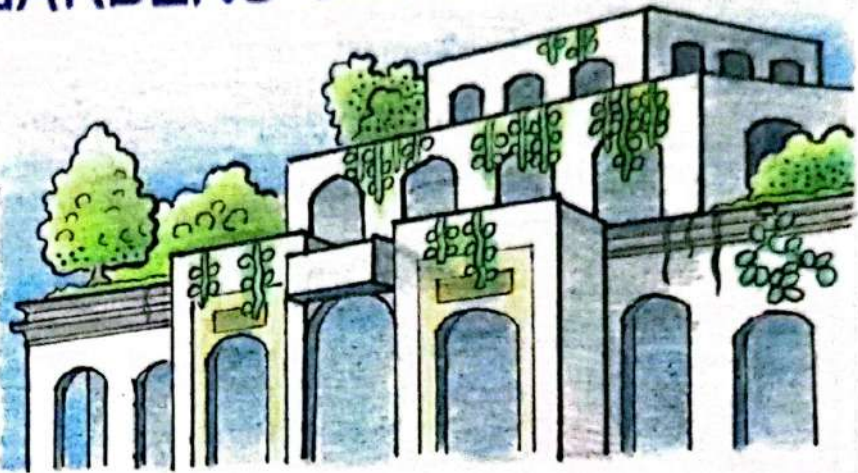
LORES AND TOLD LEGENDS TO CONCLUDE WHETHER THIS STRUCTURE HAS EVER EXISTED.

ARCHAEOLOGICAL RECORDS STATES THAT THE TOWER SUNK INTO THE SANDS OF THE IRAQI DESERT AND DISAPPEARED.

HANGING GARDENS BABIL, BABYLON (IRAQ)

ANOTHER MYTHICAL BABYLONIAN STRUCTURE BUILT BY KING NEBUCHADNEZZAR II IN HONOR OF HIS WIFE, QUEEN AMYTIS.

THE LEGEND OF THE HANGING GARDENS WAS DESCRIBED AS AN ASCENDING SERIES OF TIERED GARDENS CONTAINING A VARIETY OF TREES, SHRUBS, AND VINES.



THE HANGING GARDENS WAS ONCE LISTED AMONG THE SEVEN WONDERS OF THE ANCIENT WORLD, TOGETHER WITH THE GREAT PYRAMID OF GIZA (EGYPT), TEMPLE OF ARTEMIS AND EPHEUS (GREECE), STATUE OF ZEUS AT OLYMPIA (GREECE), MAUSOLEUM AT HALICARNASSUS (GREECE), COLOSSUS OF RHODES (GREECE) AND PHAROS LIGHTHOUSE AT ALEXANDRIA (EGYPT).

STATUS: MISSING. MANY THEORIES HAVE BEEN DEVELOPED ABOUT ITS DISAPPEARANCE BUT MOST ARCHAEOLOGISTS BELIEVED IT WAS DESTROYED DURING THE WAR THAT ALSO ENDED THE REIGN OF THE NEO-BABYLONIAN EMPIRE IN 540 B. C. E.

GATE OF ISHTAR BABIL, BABYLON (IRAQ)

THE GATE OF ISHTAR IS ONE OF THE EIGHT GATES TO THE INNER CITY OF BABYLON. CONSTRUCTED CIRCA 569 B.C.E. BY THE ORDER OF KING NEBUCHADNEZZAR II AS PART OF THE GRAND WALLED PROCESSIONAL WAY LEADING TO THE CITY.



FIGURE 22: THE GATE OF ISHTAR IN THE PROVINCE OF BABIL, IRAQ.

THE ORIGINAL STRUCTURE WAS A DOUBLE GATE WITH A SMALLER FRONTAL GATE AND A LARGER AND MORE GRANDIOSE SECONDARY POSTERIOR SECTION. THE WALLS WERE FINISHED IN GLAZED BRICKS MOSTLY IN BLUE, WITH ANIMALS AND DEITIES IN LOW RELIEF AND INTERVALS.

STATUS: PRESENT AND

PRESERVED. REPLICAS WERE DISTRIBUTED IN MUSEUMS WORLD-WIDE.

THE EMPIRE OF

ASSYRIA

(CIRCA 1200 — 540 B.C.E.)

ALSO COINED AS THE NEO-BABYLONIAN EMPIRE. THOUGH THE ASSYRIAN EMPIRE ARE LATER GENERATIONS OF THEIR PREDECESSORS, THE BABYLON, ASSYRIAN ARCHITECTURE HAS SEVERAL DISTINCT POINTERS THAT THESE TWO EMPIRES SEPARATES FROM ONE ANOTHER.

ASSYRIAN ARCHITECTURE, UNLIKE BABYLONIAN, TOOK PRECEDENCE OVER RELIGIOUS BUILDINGS. EXTERNAL WALLS OF STRUCTURES WERE PLAINLY TREATED, BUT ORNAMENTED WITH CARVED RELIEF SCULPTURE OR WITH POLYCHROME BRICKS. INTERIOR COURTS WERE ALL LARGE AND FILLED WITH COLUMNS.

LEGEND :

- ASSYRIAN TERRITORY
- - - BORDER OF PRESENT DAY IRAQ.

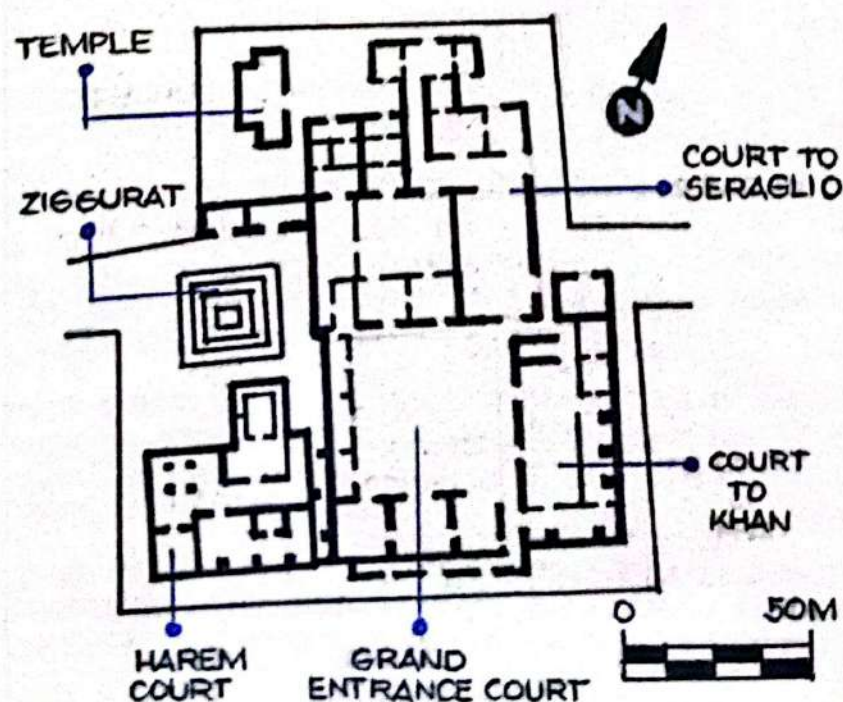


FIGURE 23: REFERENCE MAP OF THE ASSYRIAN EMPIRE WITH RESPECT TO THE BORDER OF PRESENT-DAY IRAQ.

DUR-SHARRUKIN KHORSABAD, NINEVEH, ASSYRIA (IRAQ)

A 2.88 SQUARE-KILOMETER VILLAGE WITH PALACE, TEMPLES, AND GOVERNMENT BUILDINGS COMPRESSED WITHIN THE WALLS.

THE VILLAGE CONSISTS OF PALACE, PUBLIC RECEPTION ROOMS, INNER COURT, HAREM, SEVEN-STAGED TEMPLE, STABLES, KITCHEN, BAKERY, AND WINE CELLAR.



THE APARTMENTS OF DUR-SHARRUKIN:

- HARAM (PRIVATE CHAMBER)
- SERAGLIO (PALACE PROPER)
- KHAN (SERVICE CHAMBER)

FIGURE 24: FLOOR PLAN OF DUR-SHARRUKIN, NINEVEH, ASSYRIA. (IRAQ).

THE ACHAEMENID EMPIRE OF

PERSIA (CIRCA 550 — 330 B.C.E.)

PERSIAN ARCHITECTURE IS CHARACTERIZED BY A SYNTHESIS OF ARCHITECTURAL ELEMENTS OF SURROUNDING COUNTRIES SUCH AS ASSYRIA, EGYPT, AND IONIAN GREECE.



FIGURE 25: MAP OF PERSIAN EMPIRE AT ITS PEAK IN 350 B.C.E.

IT ALSO MANIFESTS IN CONSTRUCTION OF CITIES USED FOR GOVERNANCE AND INHABITATION. TEMPLES MADE FOR WORSHIP AND SOCIAL GATHERINGS (SUCH AS ZOROASTRIAN TEMPLES) AND MAUSOLEUMS ERECTED IN HONOR OF FALLEN KINGS. (CYRUS THE GREAT)

THE QUINTESSENTIAL FEATURE OF PERSIAN ARCHITECTURE WAS ITS ECLECTIC NATURE WITH FOREIGN ELEMENTS YET PRODUCING A UNIQUE PERSIAN IDENTITY SEEN IN THE FINISHED PRODUCT.

PERSEPOLIS FARIS, PERSIA (IRAN)

PERSIA IS KNOWN AS THE COUNTRY OF IRAN TODAY. LOCATED 10 KILOMETERS SOUTHWEST OF PERSIAN COAST IS PERSEPOLIS, AN ANCIENT VILLAGE BUILT BY THE REIGN OF KING DARIUS I TO HIS SON, XERXES.

PERSEPOLIS, IN GREEK, MEANS "THE CITY OF PERSIANS" BUILT IN CIRCA 520-515 B.C.E. THE CITY, ACTING AS A MAJOR CENTER OF THE EMPIRE, HOUSED A PALACE COMPLEX AND CITADEL DESIGNED TO SERVE AS THE FOCAL POINT FOR GOVERNANCE AND CEREMONIAL ACTIVITIES.

STATUS: RUINS REMAIN. THE COMPLEX WAS TAKEN BY THE ARMY OF ALEXANDER THE GREAT IN 330 B.C.E., AND SOON AFTER, ITS WOODEN PARTS WERE COMPLETELY DESTROYED BY FIRE, LIKELY DELIBERATELY.

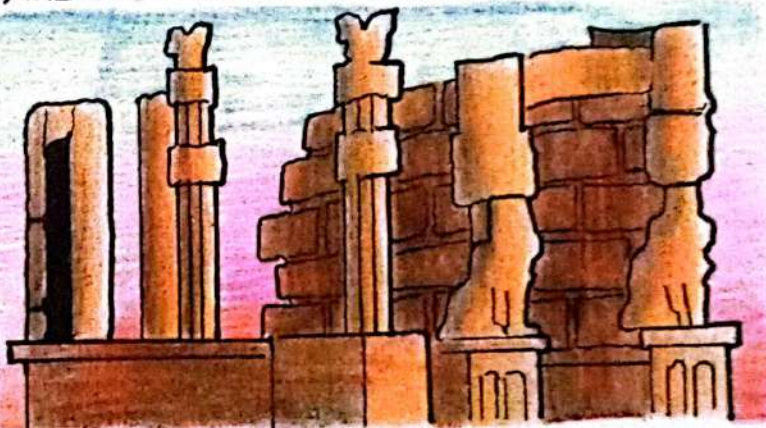
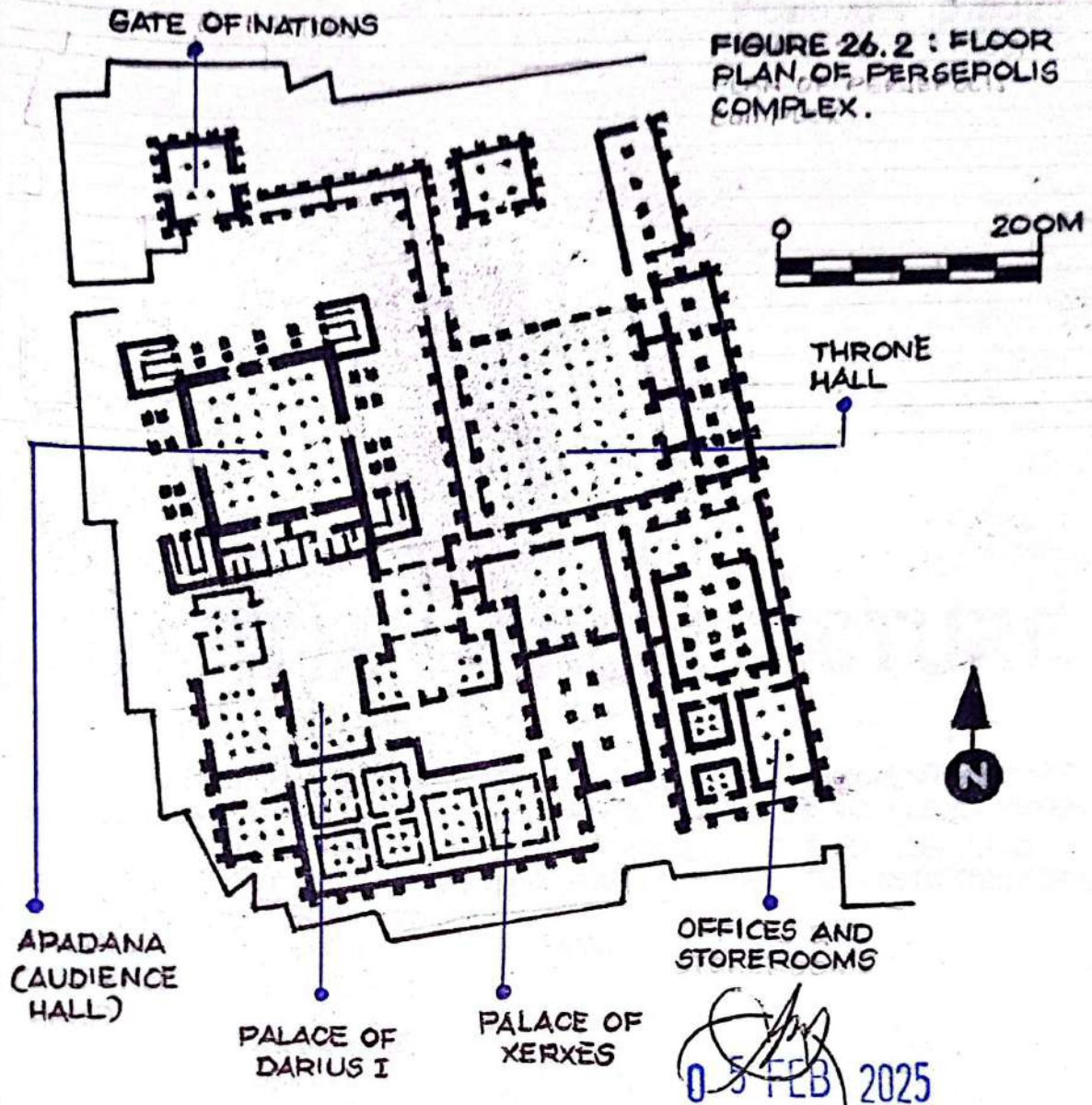


FIGURE 26.1: REMAINS OF THE GATE OF NATIONS, PART OF PERSEPOLIS COMPLEX, FARIS, IRAN

THE COMPLEX HAD UNCLEAR FUNCTION, IT WAS UNTIL LATER THEORIES THAT STATES THAT PEOPLE COME TO THE COMPLEX TO CELEBRATE SEASONAL OCCASSIONS SUCH AS NOWRUZ, KNOWN AS THE PERSIAN NEW YEAR.

SHOWN IN FIGURE 26.2 IS THE PLAN OF THE PERSEPOLIS COMPLEX FEATURING THE GATE TOWER, APADANA (AUDIENCE HALL), PALACES OF DARIUS I AND XERXES, AND THE THRONE HALL.



3

EGYPTIAN ARCHITECTURE

IN A SPAN OF OVER THREE THOUSAND YEARS, THE ANCIENT EGYPT WAS ONE DYNAMIC CIVILIZATION WHEN IT COMES TO ITS GOVERNMENT AND ARCHITECTURE. A SET OF STYLES DIFFERING AND EVOLVING OVER TIME WITH SOME INFLUENCED BY ITS PREDECESSORS AND PREVIOUS CIVILIZATIONS.

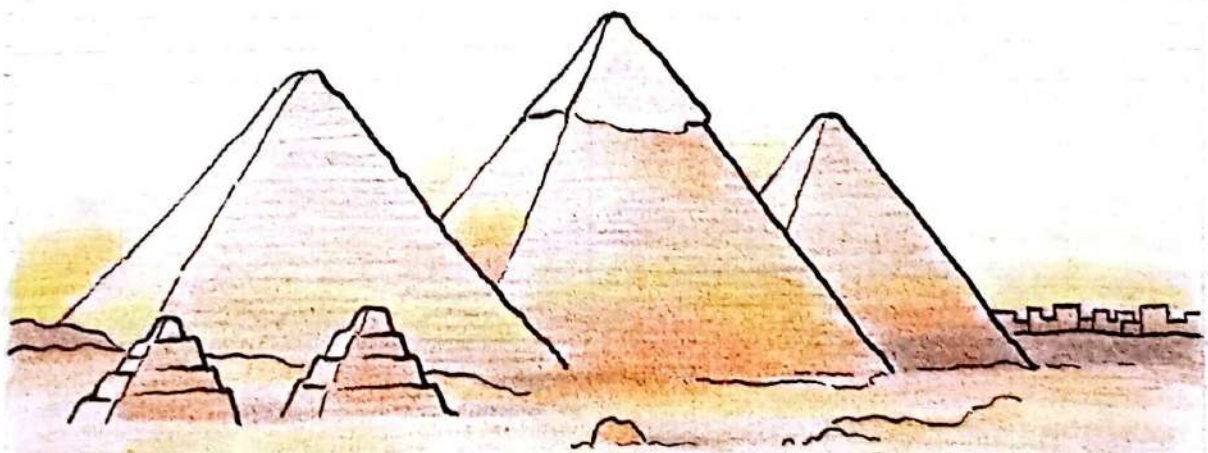


FIGURE 27.1: CITY OF THE DEAD; FEATURING THE GREAT PYRAMIDS OF CHEOPS (KHUFU), KHAFRE, AND MICERIN, AND THE MINOR STEP PYRAMIDS. (CIRCA 2580—2560 B.C.E.)

SHOWN IN FIGURE 27.2 IS THE MAP OF ANCIENT EGYPT. SITUATED ALONG THE RIVER OF NILE, THE LONGEST RIVER IN THE WORLD, RUNNING ABOUT 6,700 KM FROM LAKE VICTORIA TO ITS MOUTH, THE MEDITERRANEAN SEA, WHERE IT ENDS LIES THE ENDING STREAMS CALLED THE NILE DELTA.

GEOGRAPHY

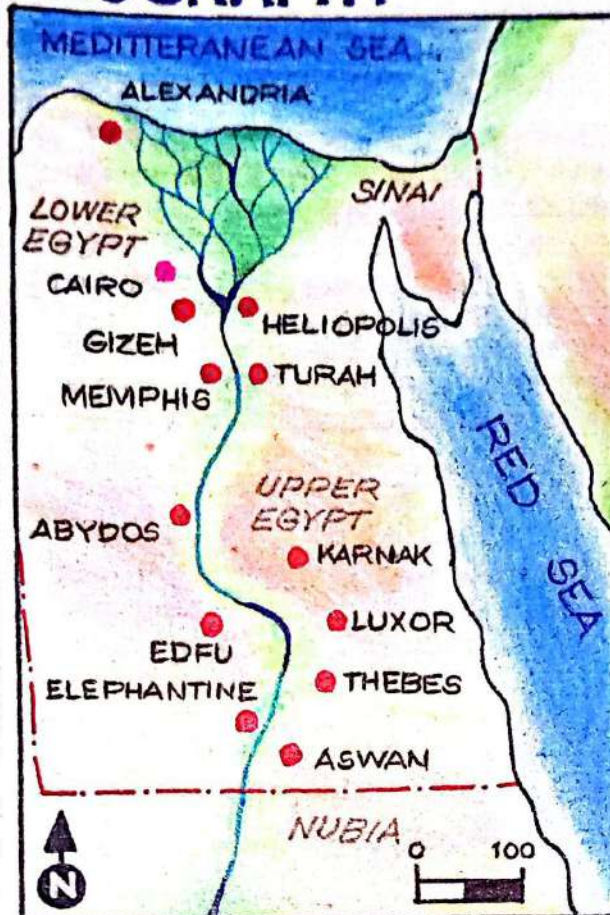


FIGURE 27.2: REFERENCE MAP OF THE ANCIENT AND PRESENT-DAY EGYPT.

LEGEND:

	NILE RIVER
	EGYPT'S CURRENT CAPITAL
	ANCIENT EGYPT CITIES
	EGYPT'S CURRENT BORDER

LANDMARKS: EGYPT'S NATURAL

SINAI - THE MOUNTAIN OF SINAI SERVES AS EGYPT'S EASTERN NATURAL BORDER BETWEEN ITS NEIGHBORING KINGDOMS.

CLIMATE

EGYPT FACES EXTREME CLIMATE AS INFLUENCED BY ITS GEOGRAPHY:

1. EGYPT LIES NEAR THE EQUATOR; A TROPICAL COUNTRY.
2. EGYPT LIES ON THE VAST DESERTS OF SAHARA, WITH TEMPE-

THE COUNTRY OF EGYPT LIES IN THE CONTINENT OF AFRICA; WHERE ITS PAST CIVILIZATION HAD FLOURISHED: THE ANCIENT EGYPT.

SIGNIFICANT CITIES:

1. **ABYDOS** - EARLY SETTLEMENTS HAVE BEEN FOUND TO EXIST PRIOR TO 3100 BCE.
2. **ALEXANDRIA** - AN ANCIENT CITY THAT DEVELOPED DURING THE CLASSICAL PERIOD (PTOLEMAIC EGYPT).
3. **HELIOPOLIS** - KNOWN FOR THE MASSIVE OBELISKS AND SUN CULT TEMPLES ERECTED COMMONLY USED TO WORSHIP RA, THE SUN GOD.
4. **MEMPHIS** - AN ANCIENT CITY DEVELOPED DURING THE OLD KINGDOM.
5. **GIZEH** - KNOWN FOR THE CITY OF THE DEAD AND THE THREE GREAT PYRAMIDS. CURRENTLY CAIRO: EGYPT'S CAPITAL.
6. **LUXOR** - TEMPLE OF LUXOR.
7. **KARNAK** - TEMPLE OF ABU SIMBEL IN KARNAK.
8. **ASWAN** - ONE OF THE CITIES WHERE ANCIENT EGYPTIANS GATHER CONSTRUCTION MATERIALS.

REGIONS:

LOWER EGYPT - ANCIENT EGYPTIAN CITIES CLOSER OR AT THE NILE DELTA AND MEDITERRANEAN SEA.

UPPER EGYPT - ANCIENT EGYPTIAN CITIES CLOSER TO THE NUBIAN DESERT AND KUSH PLATEAUX.

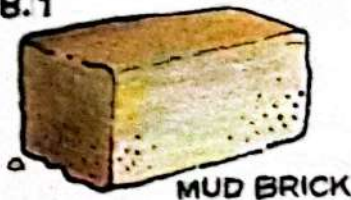
RATURES REACHING 70°C DURING DRY SEASON AND SUMMER.

3. SINCE EGYPT IS DOMINATED BY DESERTS, RAIN PRECIPITATION IS CONSIDERED A MIRACLE BY ANCIENT EGYPTIANS, FOR IT OCCURS ONCE IN EVERY FEW HUNDRED YEARS.
4. THE ABSENCE OF THIS PHENOMENON INFLUENCED THE STRUCTURES BEING CONSTRUCTED IN THE AREA. THUS, HOUSES AND MOST BUILDINGS OF ANCIENT EGYPT DO NOT HAVE DOWN SPOUTS OR GUTTERS.
5. WITH THE ABSENCE OF RAIN, THEY GET THEIR WATER RESOURCES MAINLY FROM THE NILE RIVER. EGYPTIANS BELIEVED THAT IT WAS A "GIFT FROM THEIR GODS" AS IT PROVIDES WATER AND FERTILE LAND SUFFICIENT FOR LIFE IN THE MIDDLE OF VAST DESERT WITH EXTREME CLIMATE CONDITIONS.

MATERIALS

ANCIENT EGYPTIANS USE MATERIALS IN CONSTRUCTING DWELLINGS AND OTHER STRUCTURES FROM THE NATURAL RESOURCES PRESENT IN THE PREMISE. SUCH AS THE FOLLOWING:

28.1



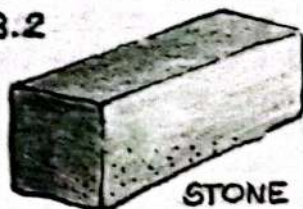
1. **SUN BAKED MUD BRICKS** — USED IN MOST STRUCTURES AS IT WAS THE MOST COMMON ELEMENT PRESENT; THE SATURATED SAND, AND THE BASIC WAY OF FORMING CONSTRUCTION MATERIALS.

METHOD:

- (1) MUD IS BEING GATHERED FROM THE RIVER BANKS OF NILE.
- (2) MUD IS PLACED INTO A MOLD.
- (3) MUD IS LEFT TO HARDEN UNDER THE SUN FOR A COUPLE OF DAYS BEFORE USING IT FOR CONSTRUCTION.
- (4) MUD IS TRANSPORTED BY ROPE TUGGING AND CARRIED BY BOATS ALONG THE NILE RIVER.

THESE MUD BRICKS ARE COMMONLY USED IN INTERIOR WALLS AND COLUMNS OF BUILDING ESPECIALLY THOSE THAT ARE BUILT DURING FIRST DYNASTIES.

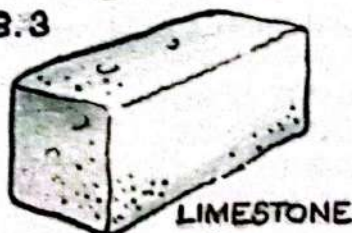
28.2



2. **STONE** — BECAME IN USE WHEN THE PYRAMIDS AND SUN CULT TEMPLES WERE INTRODUCED.

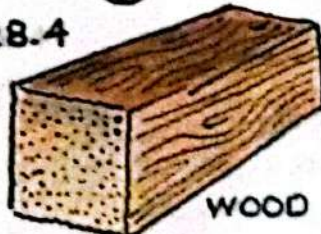
USED IN INTERIOR FRAMEWORKS TO STRENGTHEN STRUCTURE.

28.3

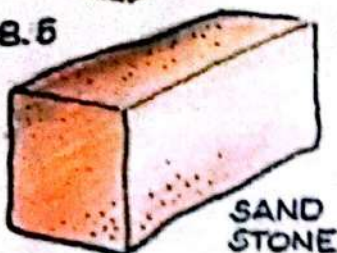


3. **LIMESTONE** — A SOFT KIND OF STONE USED AS EXTERIOR WALLS AS CASING OF THE PYRAMIDS: A PROTECTIVE LAYER TO WITHSTAND EXTREME CLIMATE CONDITIONS OF THE PREMISE.

28.4



28.5



FIGURES 28.1-5: CONSTRUCTION MATERIALS USED IN EGYPTIAN ARCHITECTURE.

4. **WOOD** — WOOD, IN EGYPT, IS SCARCE, THEY MOSTLY IMPORT WOOD FROM NEIGHBORING TERRITORIES OR FROM VERY LITTLE SUPPLY OF THEIR OASES.

WOOD IS COMMONLY USED IN **SHIP BUILDING**. SHIP BUILDING IS ESSENTIAL FOR TRANSPORTING CONSTRUCTION MATERIALS ACROSS THE KINGDOM.

MORTISE AND TENON JOINT

A WOODWORK MECHANISM OF JOINING SEVERAL PIECES OF WOOD WITHOUT DRIVING A NAIL TO IT.

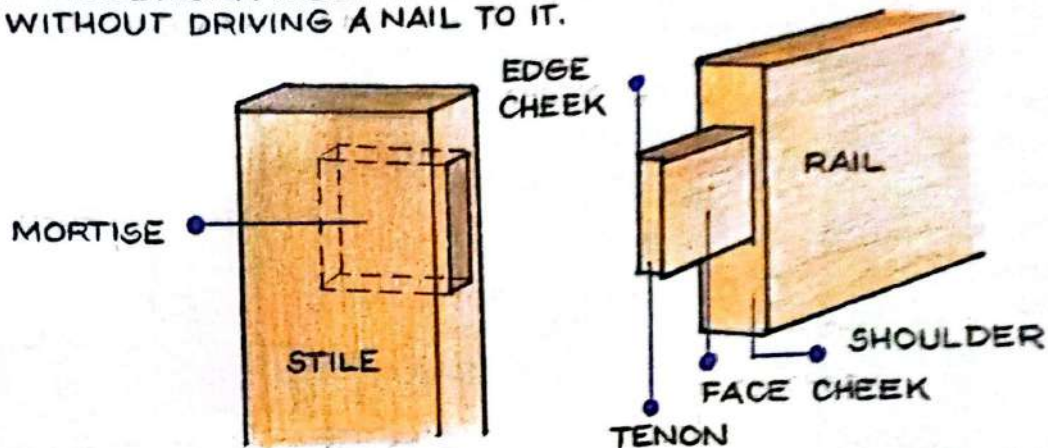


FIGURE 28.6: THE MORTISE AND TENON JOINT MECHANISM.

5. **SANDSTONE** — SHORTLY REPLACED THE USE OF SUN-BAKED MUD BRICKS BECAUSE IT IS RIGID PRE-BUILT.

CHARACTER

CHARACTER OF EGYPTIAN ARCHITECTURE HAVE EVOLVED THROUGHOUT ITS HISTORY. EGYPTIAN CHARACTER WERE BASED FROM ITS CULTURE, RELIGION, AND EVEN NATURAL ELEMENTS.

COLUMN — A SIGNIFICANT FOUNDATION OF A STRUCTURE THAT SERVES AS SUPPORT FOR ITS STANDING.

- EGYPTIAN COLUMNS VARIED FROM 16-SIDED POLYGONS TO CIRCULAR COLUMNS MEASURING FROM 60-150 CM OF ITS RADIUS.
- TYPICALLY INSPIRED FROM :
 1. PLANTS AND FLOWERS
 2. GODS AND PHAROHS
 3. FUNCTION
- CHARACTERS (ORNAMENTS) ARE CARVED IN SANDSTONE, LIMESTONE, OR GRANITE.
- 1.2M HIGH BRICKS ARE STACKED TO FORM THE NECK OR SHAFT; ACHIEVING A HEIGHT OF ABOUT 9-10 M.

BASIC PARTS:

- | | |
|--------------------|---|
| 1. ABACUS | — UPPER TIP |
| 2. CAPITAL | — DISTINCTION OF CHARACTER |
| 3. DECORATIVE BAND | — BETWEEN THE CAPITAL AND SHAFT |
| 4. SHAFT | — THE NECK OF THE COLUMN |
| 5. BASE | — LOWER TIP; THE COLUMN'S STANDING STAGE. |

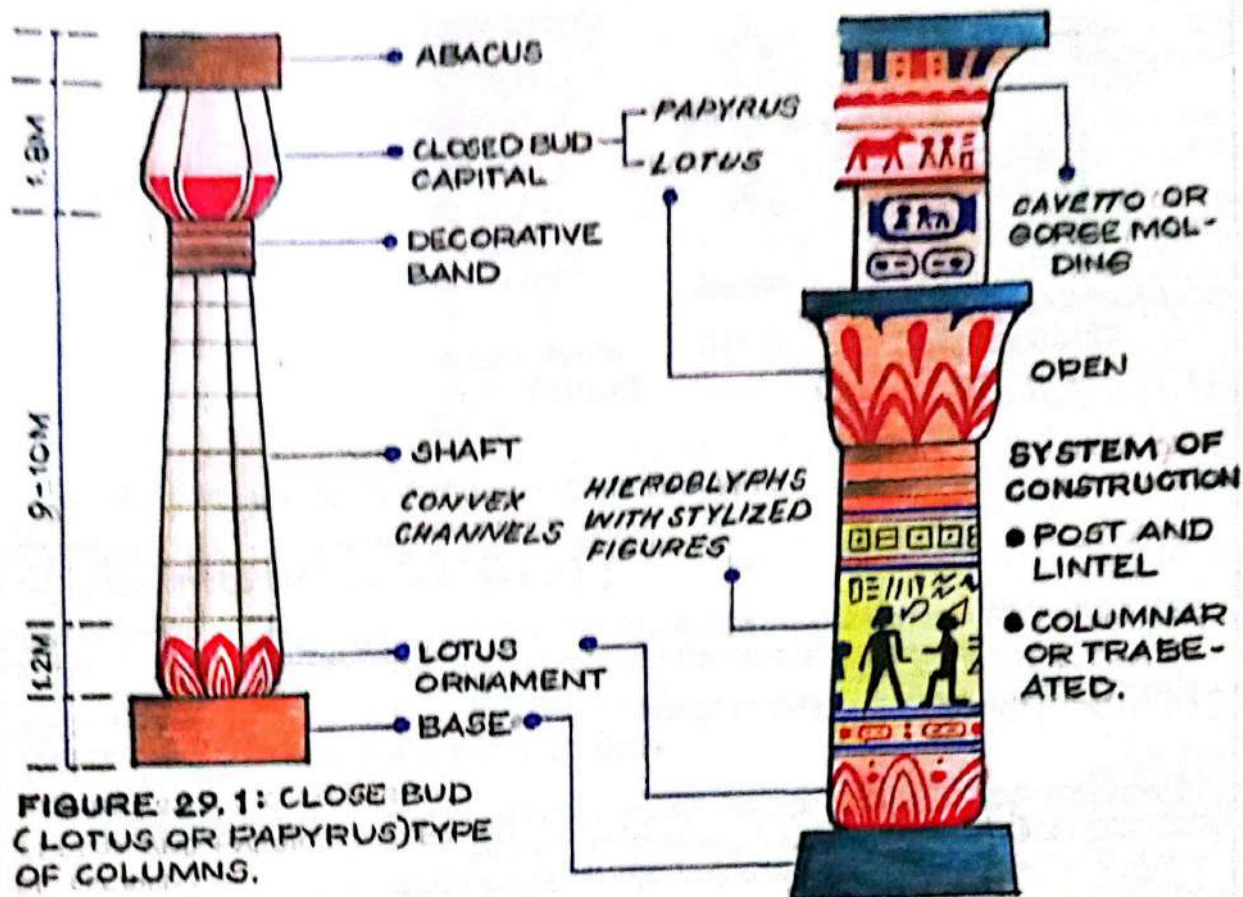


FIGURE 29.1: CLOSE BUD (LOTUS OR PAPYRUS) TYPE OF COLUMN.

FIGURE 29.2: OPEN BUD (LOTUS OR PAPYRUS) TYPE OF COLUMN.

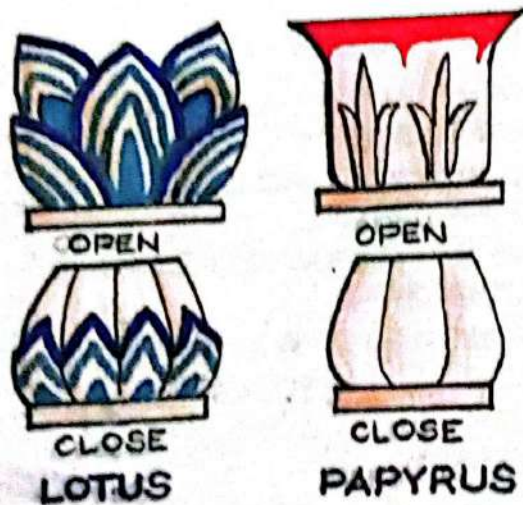
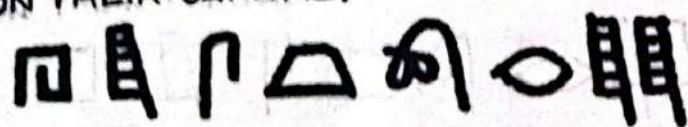


FIGURE 29.3: COMPARISON BETWEEN LOTUS AND PAPYRUS COLUMNS BASED ON THEIR CAPITAL.



OTHER EGYPTIAN ORNAMENTS:



CONTINUOUS COIL SPIRAL
30.1



FEATHER ORNAMENT
30.2



VULTURE WITH OUT-STRETCHED WING (SYMBOL OF PROTECTION)
30.3

CHARACTER ORNAMENTS:

LOTUS - A FLOWER OF LILY PAD THAT CAN BE FOUND ON THE NILE RIVER.

PAPYRUS - PLANT EGYPTIANS USED TO WRITE ON.

HIEROGLYPHS

- EGYPTIAN WRITING SYSTEM.

- A PICTOGRAM OF MORE THAN 200 CHARACTERS THAT REPRESENT A CERTAIN SYLLABLE.

- ALSO KNOWN AS SACRED CARVING.



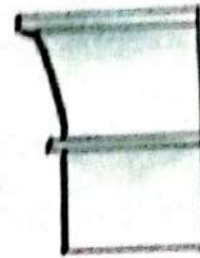
QUADRUPLE
SPIRAL
30.4



HATHOR FACE
CAPITAL PHILÆ
30.5



ANKH
30.6



EGYPTIAN ROLL
AND BEAD
30.7

FIGURE 30.1-7: EGYPTIAN ORNAMENTS.

SOCIAL HIERARCHY

EGYPTIANS ARE CLASSIFIED INTO CLASSES ACCORDING TO THEIR SIGNIFICANCE, POWER, AND INFLUENCE TO THE KINGDOM.

ANCIENT EGYPT WAS RULED BY A MONARCHY - TYPE OF GOVERNMENT, CLASSIFIED INTO DYNASTIES.

1. PHARAOH — THE RULER, KING, AND LEADER OF EGYPT; THE HIGHEST RANK, THE HIGHLY RESPECTED. ALSO KNOWN AS THE VESSEL OF GOD.
2. SON OF PHARAOH — THE PHARAOH'S NORMAL SUCCESSOR.
3. VIZIER — THE PHARAOH'S HIGHEST OFFICIAL RANK.
— THE PHARAOH'S RIGHT HAND.
4. CHANCELOR — CONTROLS THE ROYAL TREASURIES, GRANARIES, AND SUPERVISES THE CENSUS.
5. CHIEF STEWARD — IN CHARGE OF THE KING'S PERSONAL ESTATE AND HOUSEHOLD.
6. SCRIBES AND CRAFTSMEN — EGYPTIAN SCHOLARS
7. MERCHANTS
8. SLAVES — LOWEST RANK; SUBJECT FOR SACRIFICES.

RELIGION

A. EGYPT IS A POLYTHEISTIC CIVILIZATION; THEY WORSHIP MANY GODS.

EXAMPLE OF EGYPTIAN GODS:

RA — SUN GOD.

BASTET — GODDESS OF PROTECTION AND DOMESTICATION.

OSIRIS — GOD OF AFTERLIFE.

ISIS — GOD OF DEATH.

HATHOR — GODDESS OF LOVE AND BEAUTY.

B. THE EGYPTIANS MAY HAVE STRONGLY BELIEVED IN AFTER-LIFE. MOST EGYPTIAN STRUCTURES BEING ERECTED ARE SOLELY FOR THE PURPOSE OF BURYING THEIR DECEASED

PHARAOH

THEY BELIEVED THAT THE AFTERLIFE IS AN EXTENSION OF THEIR DIVINE EXISTENCE, WHICH IS TO WORSHIP THEIR GODS THROUGH THEIR KA OR SPIRIT.

- C. THE DECEASED PHARAOH WILL BE BURIED TOGETHER WITH THEIR SACRIFICE ; COULD BE DEAD ANIMAL OR SLAVE, AS THEY WILL SERVE AS THE PHARAOH'S ASSISTANTS IN THE NEXT LIFE.

HISTORY

THE HISTORY OF ANCIENT EGYPT EXTENDS FOR OVER 3000 YEARS. FROM 3100 BCE, THE ANCIENT KINGDOM, UNTIL IT BECAME A PROVINCE OF THE ROMAN EMPIRE AS IT FELL IN 30 BCE.

THIS 3000 YEARS OF GLORY WAS DIVIDED INTO PERIODS BASED ON THE DYNASTIES THAT HAVE RISEN.

INVASION ABSTRACT:

- EGYPT WAS INVADDED BY THE HYKSOS IN 1600 B.C.E.
- EGYPT WAS CONQUERED BY KING DARIUS I OF PERSIA IN 400 B.C.E.
- EGYPT WAS INFLUENCED BY THE GREEKS IN 305 B.C.E, MARKING THE START OF PTOLEMAIC DYNASTY.
- EGYPT FELL IN 30 B.C.E. AND BECAME A ROMAN PROVINCE.

- 4 KINGDOMS (GLORIOUS PERIODS)
- 3 INTERMEDIATE PERIODS (DARK AGES)
- 30 DYNASTIES

ANCIENT KINGDOM (~3100-2130 B.C.E.)

PREHISTORIC EGYPT (~3100 B.C.E) MAY HAVE BEGAN IN THE EARLY SETTLEMENTS OF ABYDOS.

MAJOR INFLUENCES:

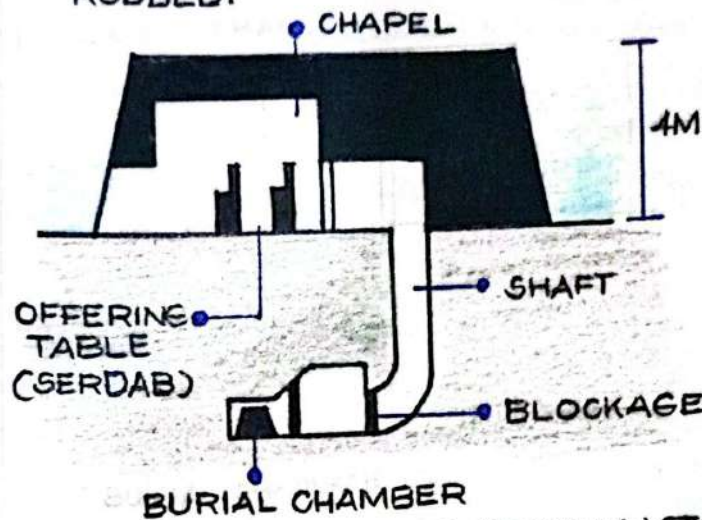
- DEVELOPMENT OF ART THEME (CHARACTER)
 - A. PERMANENCE OR PRESERVATION.
 - B. BELIEF IN AFTERLIFE.
- DEVELOPMENT OF THE WRITING SYSTEM: HIEROGLYPHS.
- INTRODUCTION OF THE FIRST BURIAL STRUCTURE: TOMBS, PARTICULARLY MASTABAS.

MASTABAS

SUBTERRANEAN BURIAL SITES OF WEALTHY NOBLES BUILT FROM SUN-BAKED MUD BRICKS IN A SHAPE OF A PYRAMIDAL FRUSTUM.

- A. A MASTABA IS MADE BY DIGGING THE BURIAL CHAMBER 6-10 FT BELOW THE GROUND AND THE CHAPEL ABOVE IS BUILT AS A WORSHIP AREA.

- B. THE OFFERING TABLE (SERDAB) IS WHERE THE VISITORS OFFER THEIR GIFTS TO THE DECEASED.
- C. BLOCKAGES ARE INSTALLED TO ENCLOSE THE BURIAL CHAMBER TO PREVENT THE SARCOPHAGUS TO BE EXPOSED AND GET ROBBED.



STATUS: MASTABAS ARE BUILT WIDELY THROUGHOUT EGYPT AND ITS HISTORY. SOME ARE DESTROYED SEVERELY, RUINS HAVE REMAINED, AND SOME HAVE WITHSTOOD UP TO PRESENT.

FIGURE 31: SECTION PLAN OF MASTABA.

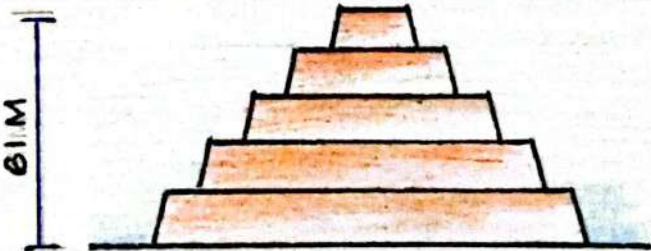
THE **EARLY DYNASTIC AND OLD KINGDOM (2980 – 2130 B.C.E.)** MARKS THE HISTORIC AND DYNASTIC PERIOD OF EGYPT AS THE FIRST PHARAOHS WERE MENTIONED:

MAJOR INFLUENCES:

- PHARAOH NARMER (MENES) UNIFIED UPPER AND LOWER EGYPT AS HE LED THE FIRST DYNASTY. THE CAPITAL IS SET TO MEMPHIS.
- INTRODUCTION OF ANOTHER BURIAL CHAMBER; THE PYRAMID, BY PHARAOH NYNETJER (DJOSER) OF THE 3RD DYNASTY.

STEPPED PYRAMID OF DJOSER, SAQQARA

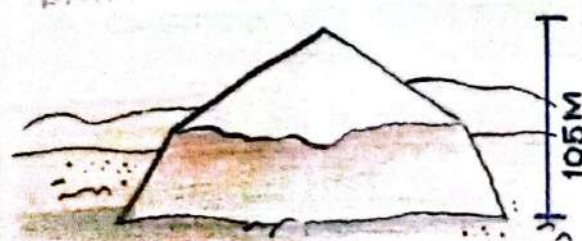
- A. A 200 FT. SIX-TIER PYRAMID BUILT IN A NECROPOLIS IN SAQQARA.
- B. DESIGNED BY THE FIRST KNOWN ARCHITECT: IMHOTEP.



STATUS: STANDING STOOD. DECLARED AS A HERITAGE SITE.

FIGURE 32: STEPPED PYRAMID OF DJOSER.

- THE BENT PYRAMID OF SNEFERU (4TH DYNASTY) FEATURES A DRAMATIC CHANGE IN ANGLE MID-TIER FROM 55° TO 43° .



- IT HAS TWO ENTRANCE ON THE NORTH AND WEST SIDE.

FIGURE 33: BENT PYRAMID OF SNEFERU.

STATUS: STANDING STOOD, A HERITAGE SITE.

THE GREAT PYRAMIDS OF GIZEH

THE PYRAMID CONSTRUCTION WAS STANDARDIZED INTO A SMOOTH WALL WITH POINTED VERTEX.

THE GREAT PYRAMIDS OF GIZEH IN THE CITY OF THE DEAD COMPRISES THE THREE MASSIVE PYRAMIDS OF THE PHARAOHS FROM 4TH DYNASTY. (SEE FIGURE 27.2 ON PAGE 22)

- | | | |
|---------------------|------------|----------------|
| 1. PHARAOH KHUFU | (CHEOPS) | LARGEST |
| 2. PHARAOH KHAFRE | (KEFREN) | SECOND LARGEST |
| 3. PHARAOH MENKAURE | (MICERINO) | THIRD LARGEST |

PARTS:

PYRAMID OF KHUFU

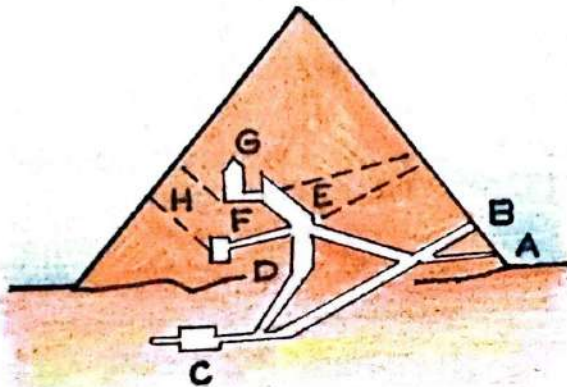


FIGURE 34: SECTION PLAN OF THE GREAT PYRAMID OF KHUFU.

- | | |
|----------------------|----------------------|
| A. PRESENT ENTRANCE | E. GRAND GALLERY |
| B. ORIGINAL ENTRANCE | F. KING'S CHAMBER |
| C. OLD TOMB CHAMBER | G. RELIEVING CHAMBER |
| D. QUEEN'S CHAMBER | H. AIR SHAFTS |

NOTE: PYRAMIDS ARE STRUCTURES DERIVED FROM THE SUPER-POSITION OF TIERS THOSE THAT ARE LIKE THE MASTABA.

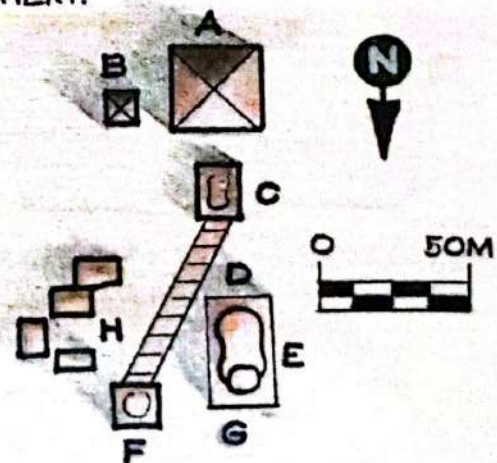
- CALLED THE GREAT PYRAMID DUE TO ITS SIZE. STANDING AT 146.4 M. 750 FT² ON PLAN.
- IT WAS THE WORLD'S TALLEST BUILDING FROM ITS ERECTION IN 2650 B.C.E. UNTIL IN THE 14TH CENTURY WHEN LINCOLN CATHEDRAL WAS BUILT.
- VIZIER HEMIUNU MAY HAVE BEEN RESPONSIBLE FOR THE BUILDING OF THE GREAT PYRAMID.

FOR THE INTENT OF BURYING THE DECEASED. WHEREAS THEIR RELATIVES ARE BURIED THIS TIME ON MASTABAS NEXT TO THEM.

PYRAMID OF KHAFRE

- DEDICATED TO PHARAOH KHAFRE, KHUFU'S SUCCESSOR.
- 143 M HIGH AND COVERS 705 SQUARE FEET AREA.
- THIS PYRAMID WAS BUILT ON A BEDROCK BASE, CAUSING IT TO APPEAR HIGHER THAN KHUFU'S.

FIGURE 35: PLAN OF PYRAMID OF KHAFRE IN THE CITY OF THE DEAD, A NECROPOLIS IN GIZEH.

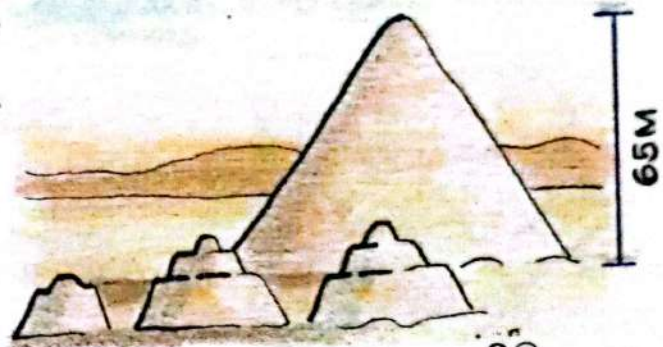


- | | |
|----------------------|------------------|
| A. PYRAMID OF KHAFRE | E. SPHINX |
| B. SECONDARY PYRAMID | F. VALLEY TEMPLE |
| C. MORTUARY TEMPLE | G. SPHINX TEMPLE |
| D. CAUSEWAY | H. MASTABA |

PYRAMID OF MENKAURE

- THE SMALLEST AMONG THE THREE GREAT PYRAMIDS OF GIZH. STANDING AT 65 M OVER A BASE OF 102 X 105 M.
- THE COMPLEX CONSIST OF THREE SMALLER QUEEN CHAMBERS TO ITS SOUTH.

FIGURE 36: GREAT PYRAMID OF MENKAURE AND THE THREE QUEEN CHAMBERS.



STATUS: BELONGS TO THE SEVEN WONDERS OF BOTH ANCIENT AND MODERN WORLD.

STANDING STILL, AND WILL STOOD FOR THE NEXT FEW HUNDRED YEARS.

UNESCO WORLD HERITAGE SITE.

THE GREAT SPHINX OF GIZH

AMONG ALL SPHINXES ACROSS IN EGYPT, THE GREAT SPHINX OF KHAFRE IS THE BIGGEST AND MOST REMARKABLE.

- IT FEATURES A HEAD OF A HUMAN OR ANIMAL, WITH A SPECIAL EGYPTIAN HEADDRESS, CONNECTED TO A BODY OF LION.
- THE GREAT SPHINX OF GIZA MAY HAVE BEEN PAINTED.
- IT MUST HAVE BEEN PHARAOH KHAFRE'S HEAD CARVED IN SANDSTONE AS PART OF HIS BURIAL COMPLEX.

STATUS: STANDING STILL TOGETHER WITH THE GREAT PYRAMIDS

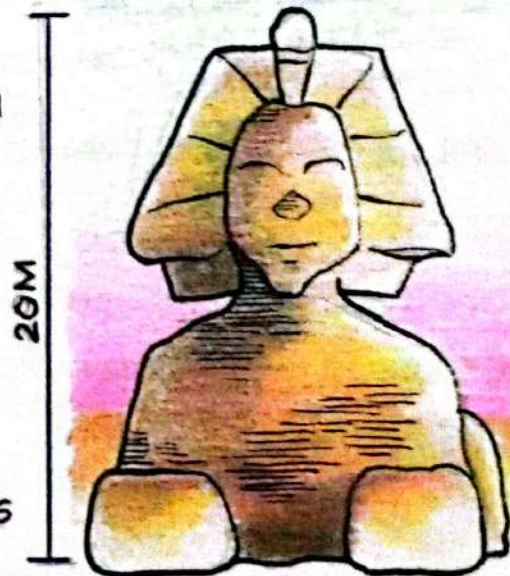


FIGURE 37: THE GREAT SPHINX OF GIZH.

TYPES OF SPHINXES:

A. ANDROSPHINX - HEAD OF A MAN, BODY OF A LION.

B. HEIRAO SPHINX - HEAD OF A HAWK, BODY OF A LION.

C. CRIOSPHINX - HEAD OF A RAM BODY OF A LION.

- PYRAMID AND SPHINX CONSTRUCTION ENDED AFTER THE DEATH OF PHARAOH MICERINO.

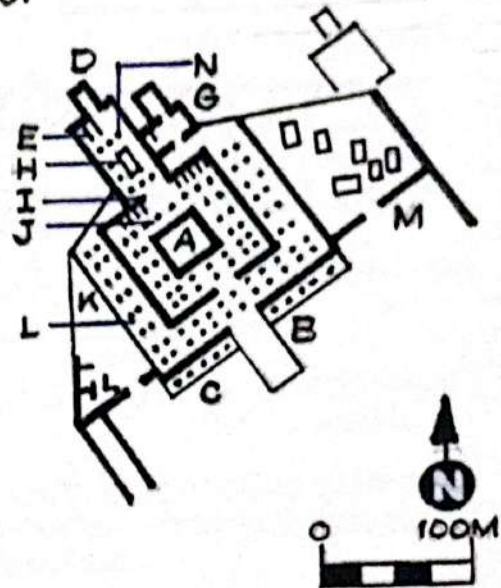
- THE ANCIENT AND OLD KINGDOM FELL WHEN PHARAOH PEPI II OF THE SIXTH DYNASTY DIED AT THE AGE OF 100 YEARS. HE IS KNOWN AS EGYPT'S LONGEST REIGNING PHARAOH FOR OVER 88 YEARS.

MIDDLE KINGDOM (2130 — 1150 BCE)

- BEGAN WHEN PHARAOH MENTUHOTEP II REUNITED EGYPT AFTER THE FIRST INTERMEDIATE PERIOD.
- PYRAMID CONSTRUCTION DECLINED AND DISAPPEARED.
- TWO CATEGORIES OF STRUCTURES CAME INTO USE: MORTUARY TEMPLES AND UNDERGROUND TOMBS.

MORTUARY TEMPLE

- MORTUARY TEMPLES, SUCH AS MENTUHOTEP'S MORTUARY TEMPLE IN DEIR EL-BAHARI, IS A BURIAL SITE INTRODUCED BY PHARAOH MENTUHOTEP II DURING THE MIDDLE KINGDOM IN REPLACEMENT WITH THE PYRAMIDS.



● PARTS:

- | | |
|------------------------|------------------------|
| A. CORE | H. TOMB ENTRANCE |
| B. RAMP | I. WOMEN'S TOMB |
| C. LOWERED PILLAR HALL | J. QUEEN'S CHAPEL |
| D. STATUE NICHE | K. AMBULATORY |
| E. SPEOS | L. UPPER PILLARED HALL |
| F. HYPOSTYLE HALL | M. SUBSTRUCTURE |
| G. CHAPEL OF GODS | N. COURTYARD |

FIGURE 38: FLOOR PLAN OF THE MORTUARY TEMPLE OF MENTUHOTEP II.

STATUS: PRESERVED WHILE FEW PARTS WERE DESTROYED BY EROSION
WORLD HERITAGE SITE.

IMPORTANT PERSONALITIES:

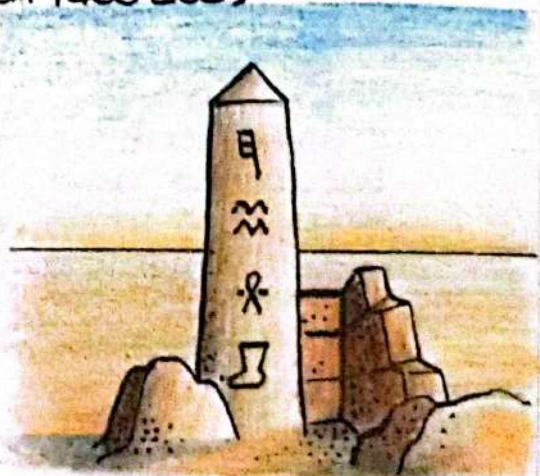
1. MENTUHOTEP II — INTRODUCED THE TYPE OF TOMB: THE ROCK-CUT TOMB.
2. SENUSRET III — ERECTED THE EARLIEST KNOWN OBELISK AT HELIOPOLIS (CIRCA 1400 BCE)

OBELISK

- ARE MONUMENTAL PILLARS USUALLY IN PAIRS AT TEMPLE ENTRANCES THAT SYMBOLIZES HELIOPOLIS SUN GOD, RA.
- THEY ARE SQUARE IN PLAN; STANDING AT ABOUT 9-10 METERS HIGH.

STATUS: PRESERVED RUINS

FIGURE 39: CLEOPATRA'S NEEDLE FROM PTOLEMAIC EGYPT.



3. AMENEMHAT I - FOUNDED THE GREAT TEMPLE OF AMMUN IN KARNAK, THE GRANDEST OF ALL TEMPLES.
- BUILT BY 16 PHaraohs IN 1700 YEARS.
 - PHaraoh HATSHEPST, TUTMOSIS II, AND RAMESES II TOMBS ARE INCLUDED IN THE TEMPLE.

NEW KINGDOM (1150 - 400 BCE)

- MORTUARY TEMPLE CONSTRUCTION REMAINS.
- CULT TEMPLE: A SIMPLER STRUCTURE OF TEMPLES, IN THE NEW KINGDOM.

TEMPLE OF KHONS

- THIS TEMPLE SHOWS AN EXAMPLE OF THE COMPONENTS AND ORGANIZATION OF TYPICAL TEMPLES.
- STATUS: RUINS

MORTUARY TEMPLE OF QUEEN HATSHEPST

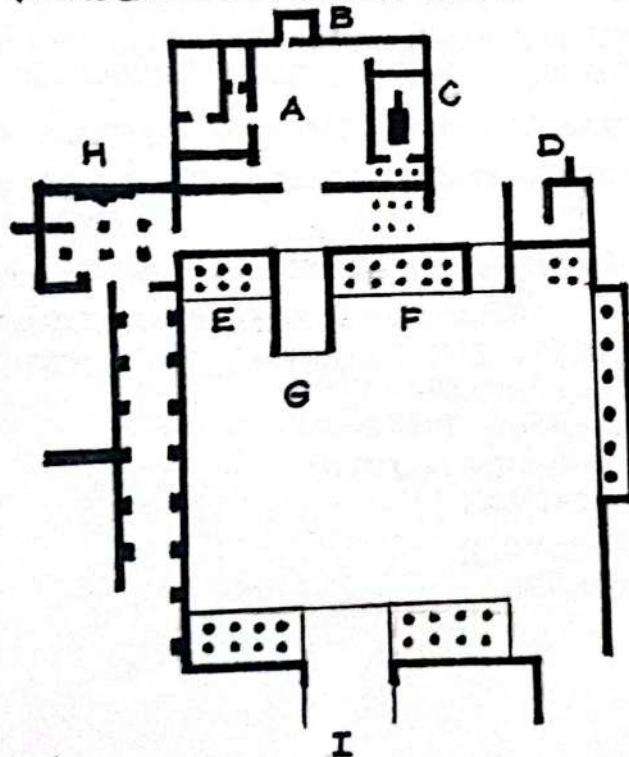


FIGURE 40: MORTUARY TEMPLE OF QUEEN HATSHEPST

STATUS: PRESERVED HERITAGE SITE.

THE GREAT TEMPLE OF ABU SIMBEL

- ONE OF THE ROCK-HEWN TEMPLES OF ABU SIMBEL COMMANDED BY THE INFATIGABLE RAMESES II.
- THE FOUR ROCK-CUT SEATED COLLOSSAL STATUE OF RAMESES II - 20 M HIGH.

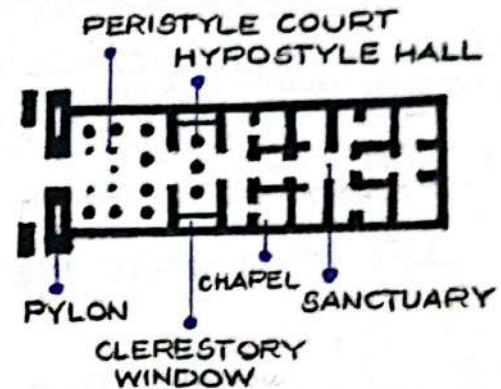


FIGURE 39: CULT TEMPLE OF KHONS

- BUILT 500 YEARS AFTER MENTUHOTEP'S MORTUARY TEMPLE.
- ARCHITECT SEMNUT MAY HAVE BEEN DESIGNED THE TEMPLE
- THREE LEVELS CONNECTED BY A RAMP.
- THE TEMPLE HAS NO DOMINANT MASS, INSTEAD, THERE IS A STRONG HORIZONTAL AXIS RUNNING ACROSS THE SET OF TERRACES AND PERPENDICULAR TO THE MOUNTAINS.
- PARTS:
 - A. UPPER COURT
 - B. SANCTUARY
 - C. ALTAR
 - D. ANUBIS CHAPEL
 - E. PUNT COLLONADE
 - F. BIRTH COLLONADE
 - G. MIDDLE COURT
 - H. HATHOR CHAPEL
 - I. LOWER COURT

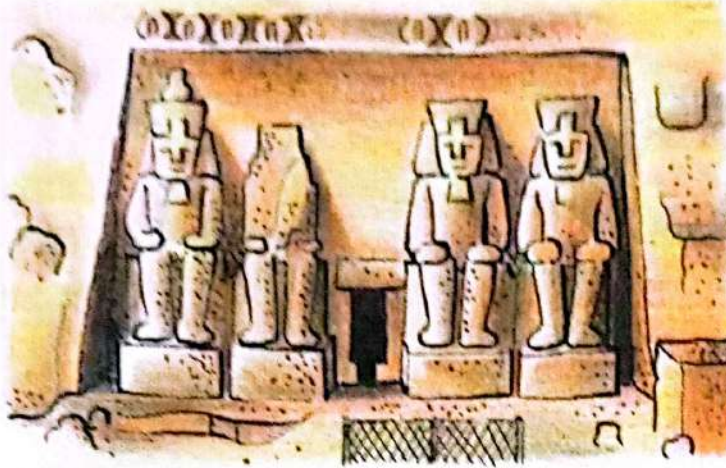


FIGURE 41: TEMPLE OF ABU SIMBEL.

IMPORTANT PERSONALITIES:

1. THOTMES I — RESPONSIBLE FOR CLEANING THE SPHINXES OF KARNAK TEMPLES.
2. AMENOPIS III — ERECTED THE COLOSSI OF MEMNON, ONE OF THE WONDERS OF ANCIENT WORLD.

STATUS: MISSING. MAY HAVE FALLEN SOME TIME IN PTOLEMAIC EGYPT.

STATUS: PRESERVED HERITAGE SITE

3. RAMESES I — BEGAN THE CONSTRUCTION OF HYPOSTYLE HALL OF AMMUN TEMPLE.
— MOVED THE CAPITAL FROM MEMPHIS TO THEBES.

PTOLEMAIC EGYPT (305 – 30 BCE)

- THE LAST PERIOD OF EGYPTIAN DYNASTIES BEFORE IT WAS CONQUERED BY THE GREEKS IN 30 BCE.
- ROOTED FROM THE FAMILY DYNASTY OF PTOLEMY AND CLEOPATRA
- HELLENISTIC CULTURE WAS INTRODUCED IN ARCHITECTURE AND ARTS.
- CAPITAL WAS ONCE AGAIN MOVED TO ALEXANDRIA.

IMPORTANT PERSONALITIES:

1. PTOLEMY I — BUILT THE LIGHTHOUSE OF ALEXANDRIA WHICH BECAME ONE OF THE SEVEN WONDERS OF THE ANCIENT WORLD.

STATUS: PERISHED DUE TO THE 1303 AD CRETE EARTHQUAKE.

2. PTOLEMY III — FOUNDED THE GREAT SERAPEUM OF ALEXANDRIA.

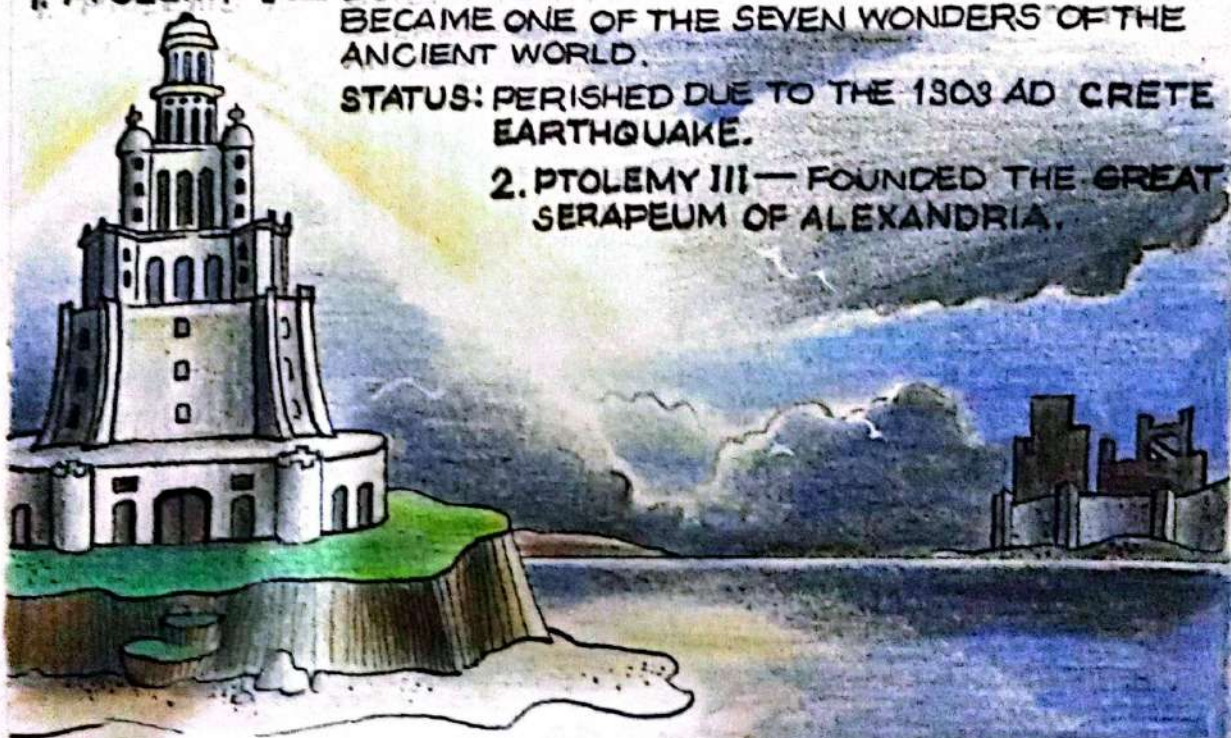


FIGURE 42: LIGHTHOUSE OF ALEXANDRIA IMAGINED.

4

GREEK ARCHITECTURE

THE RISE OF THE GREEK CIVILIZATION IN THE 21ST CENTURY B.C.E. MARKS THE START OF **CLASSICAL PERIOD** IN TERMS OF HISTORY AND TECHNOLOGY ADVANCEMENT IN THE ANCIENT TIMES. **CLASSICAL** NOT ONLY IN THE CONTEXT OF ARCHITECTURE, BUT ALSO THE WAY OF LIVING WE STILL ADAPT IN THE PRESENT ARE MOSTLY ASSOCIATED WITH THE GREEKS.

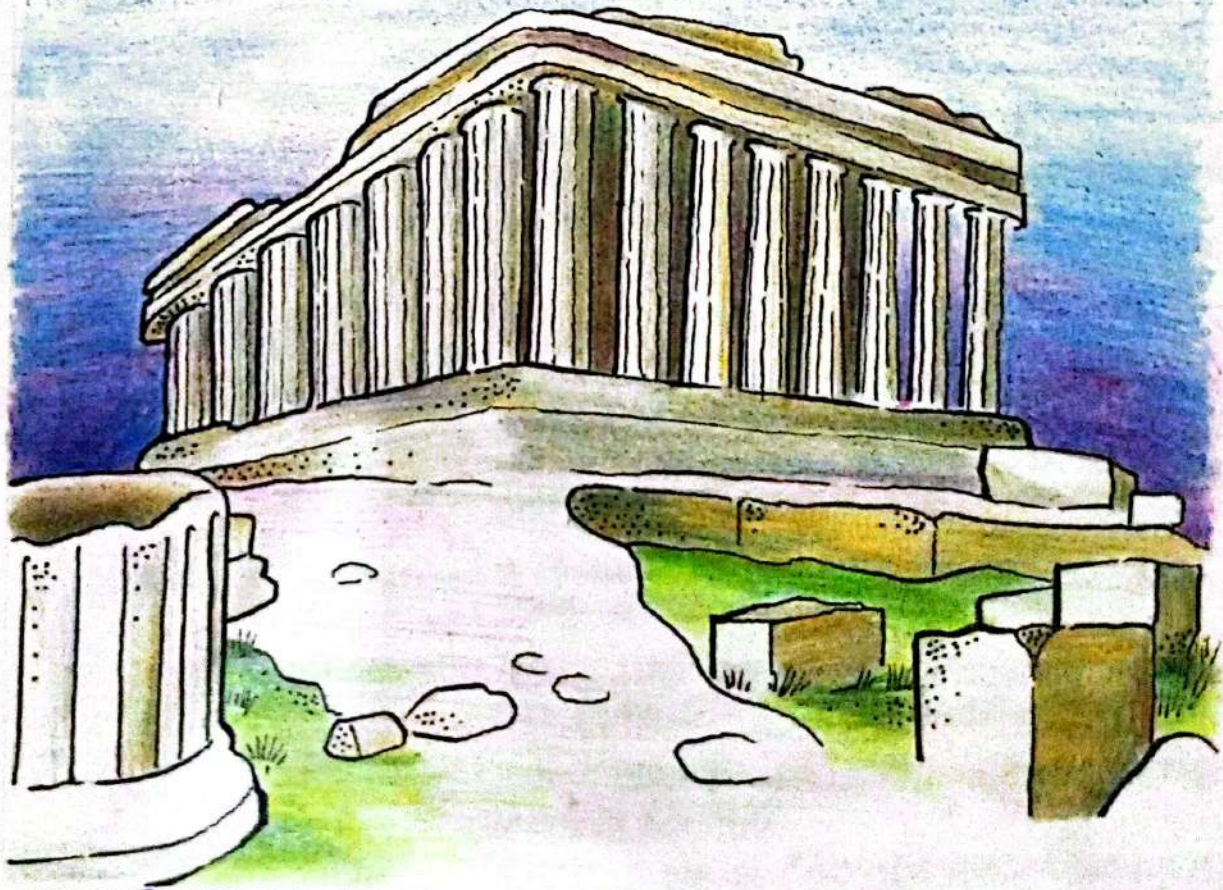


FIGURE 43: PARTHENON, TEMPLE OF ATHENA, ACROPOLIS OF ATHENS, GREECE.

GEOGRAPHY



FIGURE 44: REFERENCE MAP OF ANCIENT GREECE (CIRCA 570 BCE.)

LEGEND:

- ANCIENT GREECE POLIS
- MODERN GREECE CAPITAL
- ANCIENT GREECE BORDER (570 BCE)

● ON THE MAINLAND GREECE, JAGGED MOUNTAINS MADE COMMUNICATION AND TRANSPORTATION CHALLENGING.

● MOUNTAINS, SUCH AS MOUNT OLYMPUS, SEPARATED INHABITANTS INTO GROUPS, CLANS, AND STATES KNOWN AS POLIS.

● ARCHIPELAGO AND ISLANDS: AEGEAN SEA WAS THE INEVITABLE MEANS OF TRADE AND COMMUNICATION.

● ARCHAEOLOGISTS DEBATED THAT GREEKS ROSE FROM SETTLEMENTS IN THE ARCHIPELAGO OF CYCLADES, PARTICULAR IN THE ISLAND OF DELOS ABOUT 3000 BCE.

● MAIN CITIES (POLIS): ATHENS, SPARTA, CORINTH, MYCENAE.

CLIMATE

1. BETWEEN RIGOROUS COLD AND RELAXING HEAT.
2. THE CLEAR ATMOSPHERE AND INTENSE LIGHT INFLUENCES CONDUCTIVE TO PRECISE AND EXACT FORM.

RELIGION

A. AEGEAN RELIGION — PRIMITIVE STAGE OF NATURE WORSHIP
PRIESTESSES CONDUCT RELIGIOUS RITES, RELIGIOUS GAMES, RITUAL DANCE, AND WORSHIP ON SACRIFICIAL ALTARS.

B. GREEK RELIGION — A HIGHLY DEVELOPED FORM OF NATURE WORSHIP.

— GODS ARE PERSONIFICATION OF NATURAL ELEMENTS, OR DEIFIED MORTALS.

— GODS COULD INFLUENCE EVENTS IN THE HUMAN WORLD.

— GREEKS SOUGHT ADVICE FROM ORACLES PARTICULAR IN DELPHI.

HISTORY

AEGEAN (3000 — 1100 BCE)

1. ALSO KNOWN AS THE RISE OF THE MINOAN KINGDOM FOUNDED BY KING MINOS.
2. CIVILIZATIONS ON CRETE ISLAND AND MAINLAND GREECE FROM AROUND 1900 — 1100 BCE.
3. THE FIRST COMMERCIAL AND NAVAL POWER IN THE MEDITERRANEAN SEA FOUNDED ON TRADE WITH THE WHOLE EASTERN SEABOARD: ASIA MINOR, CYPRUS, SYRIA, PALESTINE, EGYPT, LIBYA, EVEN SOUTH ITALY AND SICILY ON THE WEST.
4. TRADE AND COMMUNICATIONS PRODUCED A UNITY OF CULTURE AND ECONOMIC STABILITY.
5. KNOSSOS WAS THE LARGEST CITY; HAD A MAGNIFICENT PALACE.

MYCENEAN (1550 — 1100 BCE)

1. ALSO KNOWN AS THE HELLADIC PERIOD.
2. CONTINUATION OF CRETEAN IDEAS AND CRAFTSMANSHIP ON MAINLAND GREECE.
3. WEALTH DUE TO THEIR CONTROL OF METAL TRADING BETWEEN EUROPE AND MIDDLE EAST.

HELLENIC (800 — 323 BCE)

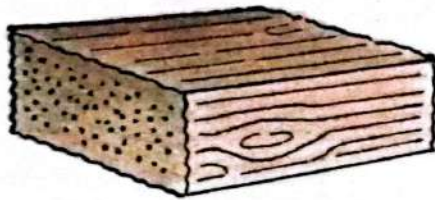
1. CITY-STATES DEVELOPED ON THE PLAINS BETWEEN MOUNTAINS — SPARTA AND ATHENS WERE THE MOST IMPORTANT.
2. THE POLIS EMERGED AS BASIS OF GREEK SOCIETY.
3. EACH CITY-STATE HAD ITS OWN RULER, GOVERNMENT, RULES, AND LAWS.
4. A FEDERAL UNITY EXISTED BETWEEN CITY-STATES DUE TO COMMON LANGUAGE, CUSTOMS, AND RELIGION.
5. SEVERAL DIFFERENT FORMS OF GOVERNMENT EVOLVED:
 - A. OLIGARCHIC
 - B. TYRANNIC
 - C. DEMOCRATIC
6. UNDER PERICLES (444 — 429 BCE) IS THE PEAK OF ATHENIAN PROSPERITY.
7. OUTBURST OF BUILDING ACTIVITY AND CONSTRUCTION DEVELOPMENTS IN ART, LAW-MAKING, PHILOSOPHY, AND SCIENCE.
8. GREEK PHILOSOPHERS KNOWN IN PRESENT: SOCRATES, PLATO, AND ARISTOTLE.
9. AMONG BEST SOLDIERS IN THE ANCIENT WORLD; HOPLITE ARMY DEFEATED REPEATED INVASIONS OF PERSIANS LED BY DARIUS AND XERXES
10. ALEXANDER THE GREAT OF PELLA, MACEDONIA, CONQUERED THE FOLLOWING COLONIES IN ASIA:

- PERSIA, ASIA MINOR, EGYPT, SYRIA, AND AFGHANISTAN IN 332 BCE.
- GREEK LANGUAGE AND CULTURE REACHED AN ENORMOUS AREA.

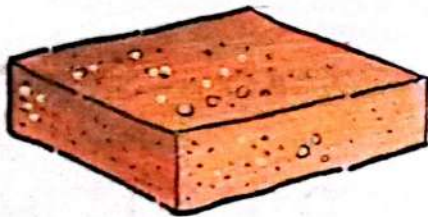
HELLENISTIC (323 - 30 B.C.E.)

- HELLENISTIC EMPIRE ESTABLISHED.
- GREEK CIVILIZATION EXTENDED.
- LIKEWISE EGYPT, GREECE FELL AND BECAME A ROMAN PROVINCE IN 30 B. C. E.

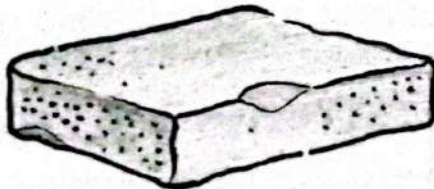
MATERIALS



45.1: TIMBER



45.2: TERRA COTTA



45.3: STONE

SYSTEM OF CONSTRUCTION:

1. COLUMNAR AND TREBEATED.
2. ROOF TRUSSES APPEARED, ENABLING LARGE SPACES TO BE UNHINDERED BY COLUMNS.

MAIN MATERIALS:

1. TIMBER — USED IN TRUSS FRAMEWORKS AND OTHER PRIMARY STEPS IN BUILDING.
2. TERRA COTTA — COMMONLY USED IN ARCHITECTURAL ORNAMENTS IN DIFFERENT ORDERS SUCH AS STATUES AND RELIEFS.
3. STONE — THE MAIN MATERIAL ACROSS GREEK ARCHITECTURAL STRUCTURES.

FIGURE 45.1-3: COMMON MATERIALS IN GREEK AND AEGEAN STRUCTURES.

CHARACTER

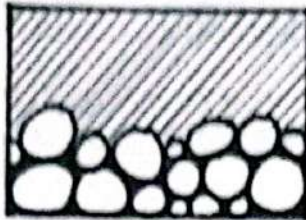
AEGEAN (3000-1100 BCE)

1. LOW PITCHED OR FLAT ROOF ON MULTI-STOREY STRUCTURES.
2. STAIRWAY WAS DEVELOPED FOR VERTICAL CIRCULATION.
3. HOUSES TERMED AS MEGARON AND PALACES WERE PRINCIPAL BUILDING TYPES:

MEGARON AREAS:

- ENCLOSED PORCH
- LIVING APARTMENT OR MEGARON PROPER.
- SLEEPING ROOM OR THALAMUS.

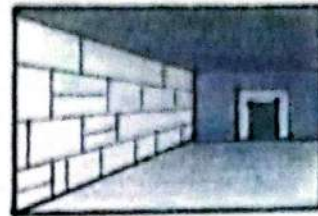
4. FOUR COMMON WALLING METHODS OF WALLING SURFACE FINISHES. (SEE FIGURES 46.1-4 ON PAGE 39.)



46.1

CYCLOPEAN

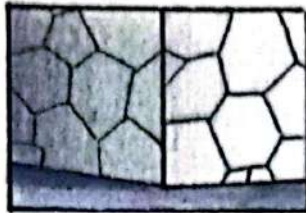
A MASONRY MADE FROM HUGE STONES AND MORTAR.



46.2

RECTANGULAR

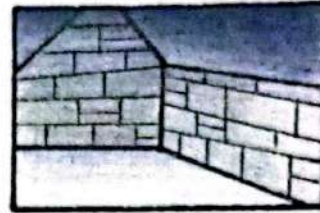
BLOCK OF STONE CUT INTO RECTANGULAR SHAPE.



46.3

POLYGONAL

A MASONRY WHICH IS CONSTRUCTED WITH STONES HAVING POLYGONAL SHAPES.



46.4

INCLINED BLOCKS

STONES WITH INCLINED BLOCKS.

FIGURE 46.1-4: WALLING METHODS SURFACE FINISHES.

5. ROUGH AND MASSIVE.

HELLENIC

1. MOSTLY RELIGIOUS ARCHITECTURE.
2. CARPENTRY IN MARBLE —TIMBER FORMS IMITATED WITH STONE WITH REMARKABLE EXACTNESS.

HELLENISTIC

1. SECULAR IN CHARACTER, BUT CIVIC—FOR THE PEOPLE.
2. PROVIDED INSPIRATION FOR ROMAN BUILDING TYPES.
3. DIGNIFIED AND GRACIOUS STRUCTURES.
4. SYMMETRICAL AND ORDERLY.

THE STRUCTURES

THE LION GATE

CIRCA 1250 B.C.E.
MYCENAE, GREECE

- **AEGEAN ARCHITECTURE.**
- THE MAIN ENTRANCE OF THE BRONZE AGE CITADEL IN MYCENAE.
- ERECTED AROUND 1250 B.C.E. IN THE NORTHWEST SIDE OF ACROPOLIS.
- NAMED AFTER THE RELIEF STRUCTURE OF TWO LIONS IN A HERALDIC POSE THAT STANDS ABOVE THE ENTRANCE.

- MOST ANCIENT STONE SCULPTURE IN EUROPE.

STATUS: PRESERVED WORLD HERITAGE SITE.

FIGURE 47:

FIGURE 47: THE LION GATE IN MYCENAE, GREECE.



PALACE OF KING MINOS

KNOSSOS, CRETE ISLAND, GREECE

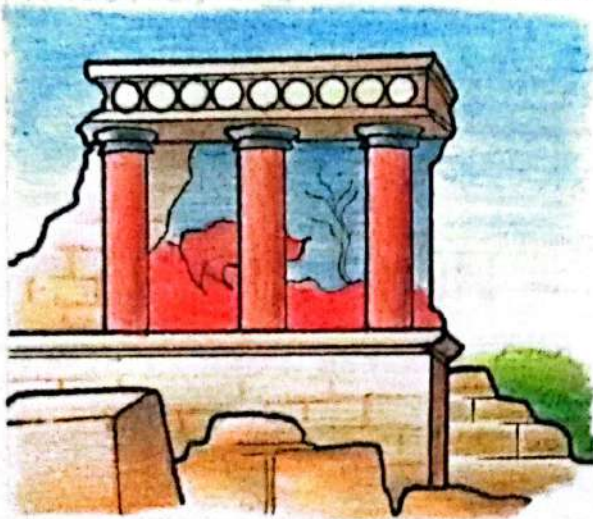


FIGURE 48: PALACE OF KING MINOS; PRESERVED RUINS.

STATUS: RUINS ARE PRESERVED AND CURRENTLY STUDIED BY ARCHAEOLOGISTS.

- LOCATED JUST SOUTH OF HERAKLION (MODERN PLACE) NEAR THE NORTH COAST OF CRETE.

- BUILT BY THE MINOANS.
- COVERS ABOUT 14,000 M²
- PARTS:

- ENTRANCE
- LOWER WARD
- MIDDLE WARD
- UPPER WARD

TWO TYPES OF TOMBS:

- THOLOS** - A STONE VAULTED CONSTRUCTION SHAPED LIKE AN OLD-FASHIONED BEEHIVE.
- CHAMBER TOMB** - RECTANGULAR IN SHAPE ABOUT 3.6-6.1 M CUBE IS CUT WITHIN THE SCOPE OF A CONVENIENT HILLSIDE AND APPROACHED WITH A PASSAGE OR DROMOS.

ACROPOLIS OF ATHENS

ATHENS, GREECE

- **HELLENIC ARCHITECTURE**

PLANNED AND CONSTRUCTED DURING THE REIGN AND GUIDANCE OF THE GREAT GENERAL AND STATESMEN: PERICLES OF ATHENS.

IMPORTANT STRUCTURES FOUND IN ACROPOLIS:

- PRINCIPAL TEMPLE
- PINACOTHECA
- GLYPHOTHOTECA
- STATUE OF ATHENA

- E. THE ERECHTHEION
F. OLD TEMPLE OF ATHENA
G. THE PARTHENON
H. THEATER OF DIONYSUS

- I. STOA OF EUMENES
J. ODEION OF HERODES ATTICUS
K. TEMPLE OF NIKE APTEROS

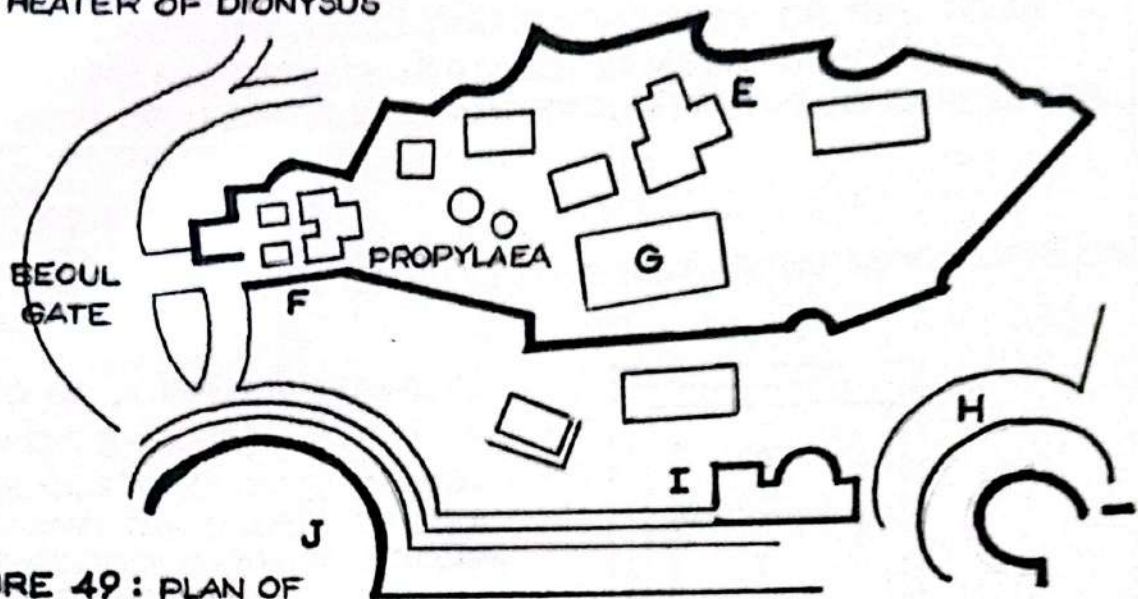


FIGURE 49: PLAN OF THE ACROPOLIS OF ATHENS.

THE PARTHENON IN ACROPOLIS

ARCHITECTURAL STYLE: DORIC PERISTYLE, OCTASTYLE
ARCHITECTS : ICTINUS AND CALLICRATES
MASTER SCULPTOR : PHIDIAS

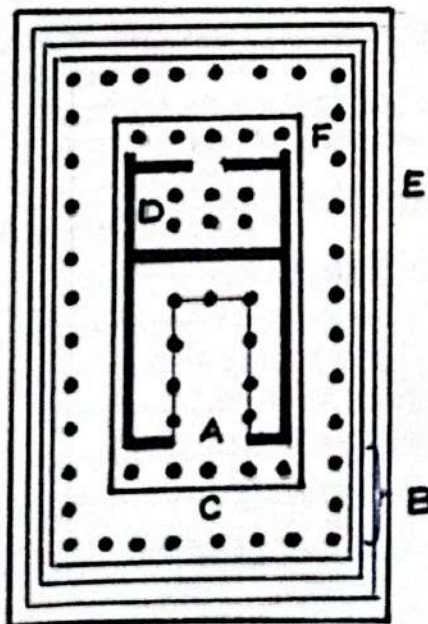


FIGURE 50: PLAN OF THE PARTHENON

STATUS: PRESERVED RUINS;
WORLD HERITAGE
SITE; SEVEN WON-
DERS OF THE ANCIENT
AND MODERN WORLD.

- BUILT DURING THE ATHENIAN EMPIRE RULE IN HONOR OF THE GODDESS, ATHENA.

- CONSTRUCTION BEGAN IN 447 BCE, COMPLETED IN 438 BCE, AND RE-DE-CORATED IN 432 BCE.

- 45 FT TALL, 228x101 FT IN PLAN.

- THE BEST EXAMPLE OF USING DORIC STYLE.

- OTTOMAN ATTATURKS INVADED PARTHENON IN 1460, IT BECAME A MOS-QUE.

- PARTS:

A. CELLA

B. PERISTYLE COLONADE

C. PRONAOS

D. OPITHDOMOS

E. STEREOBATE

F. STYLOBATE

AGORA OR CIVIC SQUARE

- A CENTRAL PUBLIC SPACE IN ANCIENT GREEK.
- BEST REPRESENTATION OF CITY FORMS RESPONSE TO ACCOMMODATE THE SOCIAL AND POLITICAL ORDER OF THE POLIS.
- AGORA MEANS GATHERING PLACE OR ASSEMBLY.
- CENTER OF THE ATHLETIC, ARTISTIC, SPIRITUAL, AND POLITICAL LIFE IN THE CITY.

TEMPLES

THE CHIEF STRUCTURE. USUALLY, THE PLAN IS IN RECTANGULAR SHAPE.

PARTS OF A GREEK TEMPLE:

1. NAOS (CELLA)

— PRINCIPAL CHAMBER CONTAINING THE STATUE OF GOD OR GODDESS WITH POSTICOES AND COLONNADE.

2. PRONAOS

— INNER PORTICO IN FRONT OF NAOS OR CELLA. FACES THE EAST.

3. EPINAOS

— POSTICO WHICH SERVES AS A TREASURY CHAMBER.

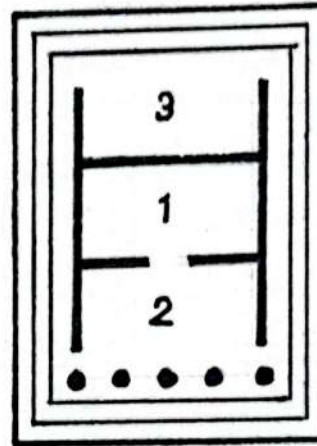


FIGURE 51: PARTS OF A GREEK TEMPLE.

DESCRIBING TEMPLES (RECTANGULAR)

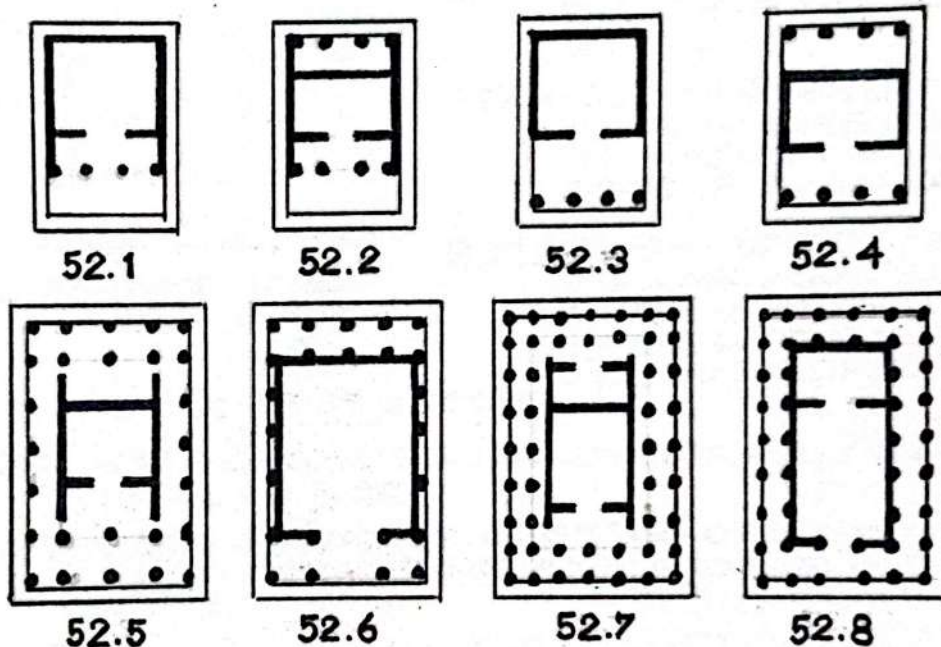
1. ACCORDING TO THE NUMBER OF COLUMNS AT THE ENTRANCE FRONT.
2. BY THE ARRANGEMENT OF THE EXTERIOR COLUMNS OF THE TEMPLE IN RELATION TO ITS NAOS.

NO. OF COLUMNS	DESCRIPTION	NO. OF COLUMNS	DESCRIPTION
1	HENOSTYLE	7	HEPTASTYLE
2	DISTYLE	8	OCTASTYLE
3	TRISTYLE	9	ENNEASTYLE
4	TETRASTYLE	10	DECASTYLE
5	PENTASTYLE	12	DODECASTYLE
6	HEXASTYLE		

FORMS OF GREEK TEMPLE:

1. IN ANTIS — TEMPLES THAT HAVE ONE TO FOUR COLUMNS BETWEEN ANTAE AT THE POINT. TWO IS THE USUAL NUMBER.
2. AMPHI-ANTIS — HAVE ONE TO FOUR COLUMNS BETWEEN ANTAE AT THE FRONT AND REAR. TWO IS THE USUAL NUMBER.

3. PROSTYLE — HAVE A PORTICO OF COLUMNS IN FRONT.
 4. AMPHI-PROSTYLE — HAVE A PORTICO OF COLUMNS AT THE FRONT AND REAR.
 5. PERIPTERAL — HAVE A SINGLE LINE OF COLUMNS ATTACHED TO THE NAOS WALL.
 6. PSEUDO-PERIPTERAL — HAVE FLANKED OF COLUMNS ATTACHED TO THE NAOS WALL.
 7. DIPTERAL — HAVE A DOUBLE LINE OF COLUMNS SURROUNDING THE NAOS.
 8. PSEUDO-DIPTERAL — TEMPLES THAT ARE LIKE THE PREVIOUS, BUT THE INNER RANGE OF COLUMNS ARE OMITTED ON THE FLANKS OF THE NAOS.
- THOLOS — A ROUND TEMPLE OF GREEK PERIPTERAL DESIGN COMPLETELY ENCIRCLED BY A COLONNADE.



FIGURES 52.1-8: FORMS OF GREEK TEMPLE.

ORDERS OF GREEK ARCHITECTURE:

DORIC ORDER

- OLDEST AND SIMPLEST.
- DEVELOPED IN GREECE IN THE 7TH CENTURY B.C. E. (MAINLAND AND WESTERN GREECE)
- WITHOUT BASE.
- SHORT, FACETED, HEAVY COLUMNS WITH PLAIN, ROUND, CAPITALS.

PARTS OF THE DORIC ORDER:

1. TRIGLYPH — ONE OF THE VERTICAL BLOCKS, SEPARATING THE METOPES IN A DORIC FRIEZE.

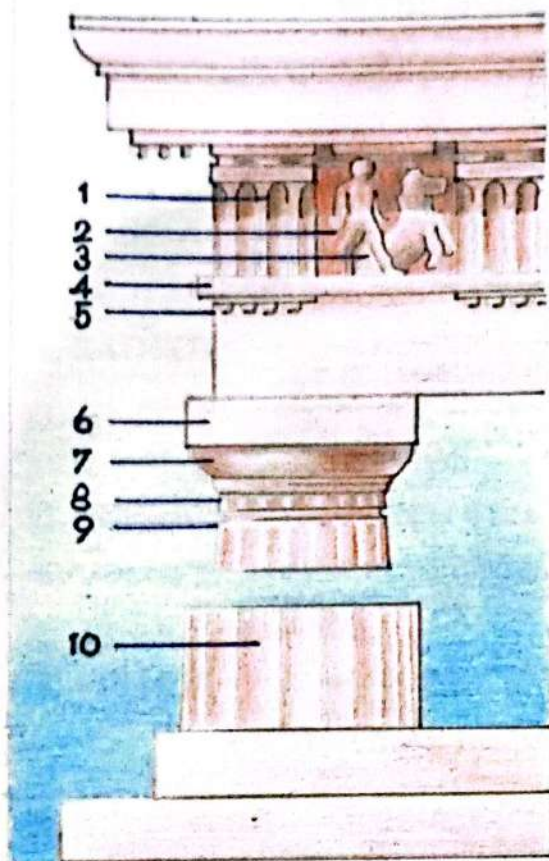


FIGURE 53: DORIC STYLE COLUMN.

2. METOPE — ANY OF THE PANELS, EITHER PLAIN OR DECORATED BETWEEN TRIGLYPHS. (INTERGLYPHS)

3. ZOPHORUS — A FRIEZE CARVED FIGURES OF PEOPLE OR ANIMAL.

4. TAENIA — A RAISED BAND OR FILLET SEPARATING THE FRIEZE FROM THE ARCHITRAVE.

5. REGULA — A FILLET BELOW THE TAENIA IN DORIC ENTABLATURE CORRESPONDING TO THE TRIGLYPH ABOVE. (GUTTAE BAND)

6. ABACUS — FLAT SLAB FORMING THE TOP OF THE COLUMN CAPITAL.

7. ECHINUS — PROMINENT CIRCULAR MOLDING SUPPORTING ABACUS OF A DORIC OR TUSCAN CAPITAL.

8. NECKING — UPPER PART OF A COLUMN, ABOVE THE SHAFT AND BELOW THE PROJECTING PART OF THE CAPITAL WHEN DIFFERENT.

TIATED BY A MOLDING OR GROOVE.

9. ANNULET — AN ENCIROLING BAND, MOLDING, OR FILLET ON A CAPITAL OR SHAFT.

10. FLUTING — DECORATIVE MOTIF CONSISTING OF A SERIES OF LONG, ROUNDED, PARALLEL GROOVES.

IONIC ORDER

- A CLASSICAL ORDER DEVELOPED IN GREEK COLONIES OF ASIA MINOR IN THE 6TH CENTURY B.C.E.
- CHARACTERIZED BY THE SPIRAL VOLUTES OF ITS CAPITAL.
- THE FLUTED COLUMNS TYPICALLY HAD MOLDED BASES AND SUPPORTED AN ENTABLATURE CONSISTING OF AN ARCHITRAVE OF THREE FASCIAS, A RICHLY DECORATED FRIEZE AND A CORNICE CORBELED OUT ON EGG-AND-DART DENTIL MOLDING.

PARTS OF THE IONIC ORDER:

1. EGG AND DART — AN ORNAMENTAL MOTIF FOR ENRICHING AN OVOLO OR ECHINUS.

— CONSISTING OF AN CLOSELY YET ALTERNATING SERIES OF OVAL AND POINTED FORMS.

2. DENTIL — ANY OF THE SERIES OF CLOSELY SPACED SMALL RECTANGULAR BLOCK FORMING A MOLDING PROJECTING BENEATH THE CORONA OF THE CORNICE.
3. FASCIA — ONE OF THREE HORIZONTAL BANDS MAKING UP THE ARCHITRAVE.
4. CATHETUS — THE VERTICAL GUIDELINE THROUGH THE EYE OF A VOLUTE, FROM WHICH SPIRAL FORM IS DETERMINED.
5. ECHINUS — BETWEEN VOLUTES.
6. VOLUTE — SPIRAL, SCROLL-LIKE ORNAMENT AS ON THE CAPITAL.
7. FILLET — A NARROW PART OF THE SURFACE OF A CLASSICAL COLUMN TO ITS BASE.
8. APOPHYGE — A SMALL CURVE CONCAVE, JOINING THE SHAFT TO ITS BASE.
9. SCOTIA — A DEEP, CONCAVE MOLDING BETWEEN TWO FILLETS. (TROCHYLUS)
10. TORUS — A LARGE, CONVEX, SEMICIRCULAR MOLDING COMMONLY FOUND DIRECTLY ABOVE THE FLINT OF THE BASE.

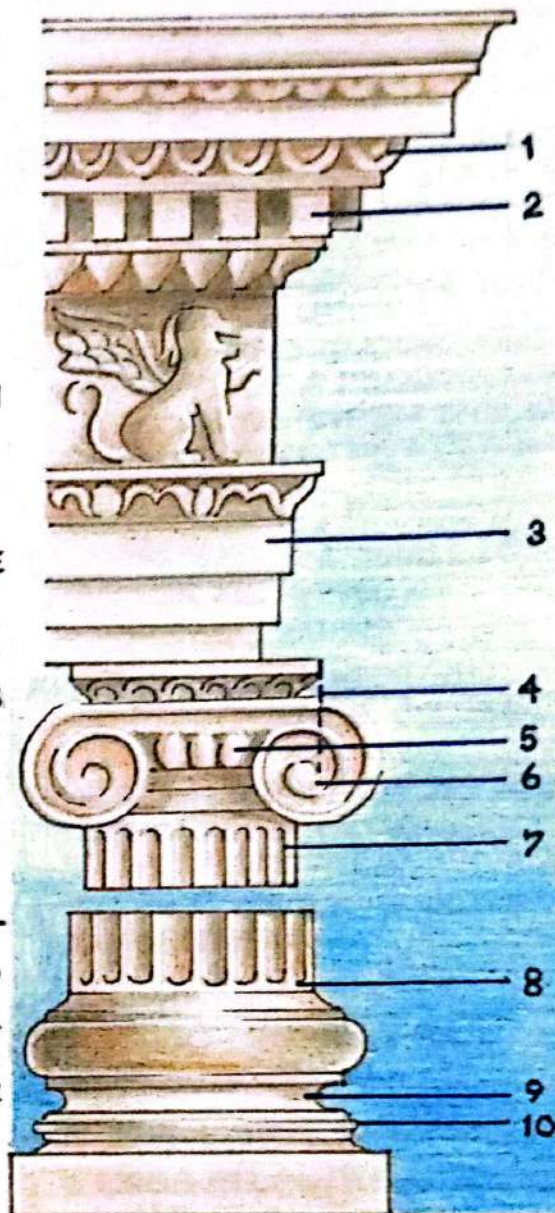


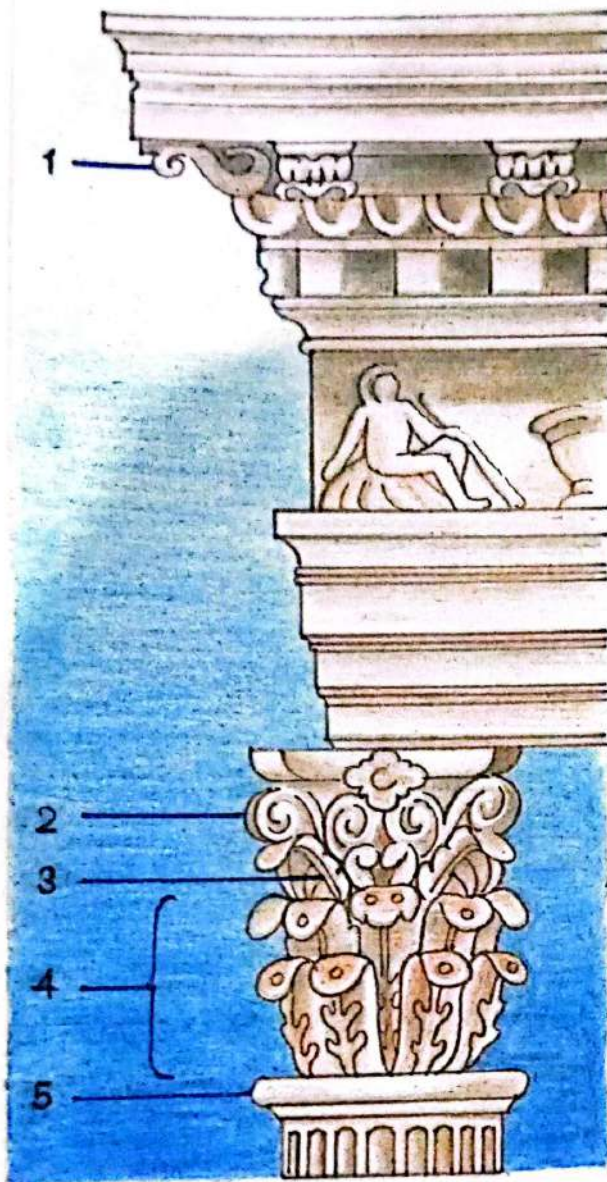
FIGURE 54: IONIC STYLE COLUMN.

CORINTHIAN ORDER

- THE MOST ORNATED AMONG THE GREEK ORDERS.
- DEVELOPED BY THE GREEKS IN THE 4TH CENTURY B.C.E.
- USED IN MORE EXTENSIVELY ROMAN ARCHITECTURE.
- SLENDERED PROPORTIONS AND CHARACTERIZED BY A DEEP, BELL-SHAPED CAPITAL DECORATED WITH LEAVES OF ACANTHUS — THUS IN THE ABACUS.

PARTS OF THE CORINTHIAN ORDER :

1. MODILLION — AN ORNAMENT BRACKET FORMED INTO A SCROLL WITH ACANTHUS, USED IN THE SERIES BENEATH THE CORONA.



2. HELIX — A SPIRAL ORNAMENT SUCH AS ANY OF THE VOLUTES ISSUING FROM THE CAULICULUS.

3. CAULICULUS — ANY OF THE ORNAMENTAL STALK BETWEEN ACANTHUS LEAVES FROM WHICH THE VOLUTE SPRINGS.

4. BELL — THE UNDERLYING PART OF A FOLIATED CAPITAL BETWEEN THE ABACUS AND THE NECK MOLDING.

5. ASTRAGAL — A SMALL, CONVEX MOLDING.

FIGURE 55: CORINTHIAN STYLE COLUMN.

OTHER GREEK TEMPLES AND THEIR CLASSIFICATIONS:

1. TEMPLE OF ZEUS OLYMPUS
AGRIGENTUM

DORIC
PSEUDO-PERIPTERAL
HEPTASTYLE

- 2ND LARGEST TEMPLE
- USES ATLANTES, A CARVED MALE FIGURE.

ARCHITECT: THERON
STATUS: PRESERVED RUINS.

2. TEMPLE OF APOLLO EPICURIUS, BASSAE

DORIC, IONIC, CORINTHIAN
PERIPTERAL
HEPTASTYLE

ARCHITECT: ICTINUS

3. TEMPLE OF NIKE APTEROS, ATHENS

IONIC
AMPHI-PROSTYLE
TETRASTYLE

- DEDICATED TO THE WINGLESS VICTORY.

ARCHITECT: CALLICRATES

4. THE ERECTHEION, ATHENS

IONIC

APTERAL, IRREGULAR PLAN, NO SIDE COLONNADES.

- FORMS THE IMPOSING ENTRANCE TO THE ACROPOLIS.
- USES CARYATID PORCH. (SEE FIGURES 58.1-2 ON PAGE 49)

A. CARYATID — FEMALE FIGURE SUPPORT WITHOUT BASKET ON HER HEAD.

B. CANEPHORAE — FEMALE FIGURE SUPPORT WITH BASKET ON HER HEAD.

- USES EGG AND DART ORNAMENT.

5. THE TEMPLE OF ARTEMIS, EPHEBUS

HELLENISTIC TEMPLE

IONIC

DIPTERAL

OCTASTYLE

- ONE OF THE SEVEN WONDERS OF THE ANCIENT WORLD.
- BURNED DOWN IN 356 B.C.E. DUE TO ARSON.

ARCHITECT: DEINOCRATES
MASTER SCULPTOR: SCOPAS

PROPYLAEA

AN ENTRANCE GATEWAY WHICH MARKED THE APPROACH TO THE SACRED ENCLOSURE IN MANY CITIES IN GREECE.

EXAMPLES:

1. PROPYLAEA OF ATHENS

- FORMS OF IMPOSING ENTRANCE TO THE ACROPOLIS.

ERECTED : PERICLES

ARCHITECT : MNENICLES

2. PROPYLAEA OF EPIDAUROS

3. PROPYLAEA OF PRIENE

4. PROPYLAEA OF ELEUSIS

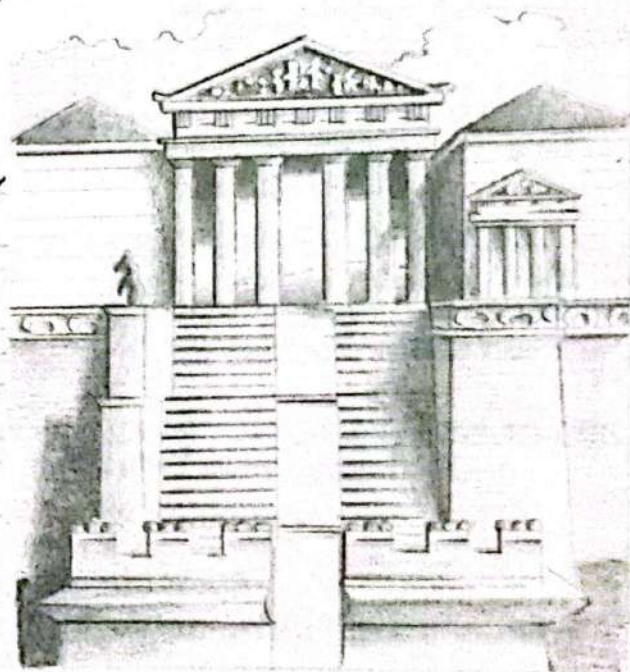


FIGURE 56: PROPYLAEA OF ATHENS.

THEATER

AN OPEN AIR STRUCTURE WHICH CONSISTED OF AN ORCHESTRA, AUDITORIUM OR CAVEA, CUT OF THE SLOPE OF HILLSIDE, IN OR NEAR THE POLIS.

PARTS OF THE THEATER:

1. ORCHESTRA
2. AUDITORIUM OR CAVEA
3. SKENE OR SCENE
4. PARASCENIA OR DRESSING ROOM
5. PROSKENION — STAGE
6. PARASKENIA — WINGS
7. PARADOI — ENTRANCE TO THE ORCHESTRA
8. ENTRANCES FOR THE SPECTATORS.

9. KERKIDES — "WEDGES", SECTIONS OF SEATING.
10. PROHEDRIA — SEATS OF HONOR.
12. ANALEMMA — OUTER WALL.

11. DIOZOMA — WIDE, HORIZONTAL WALKWAY BETWEEN THE UPPER AND LOWER AUDITORIUM SEATS.

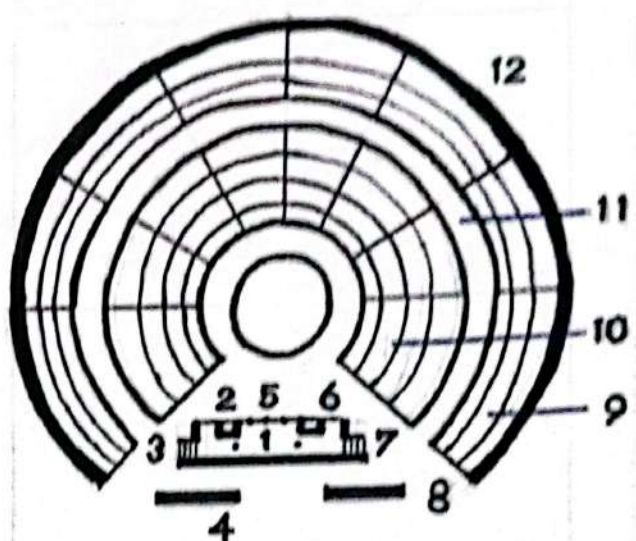
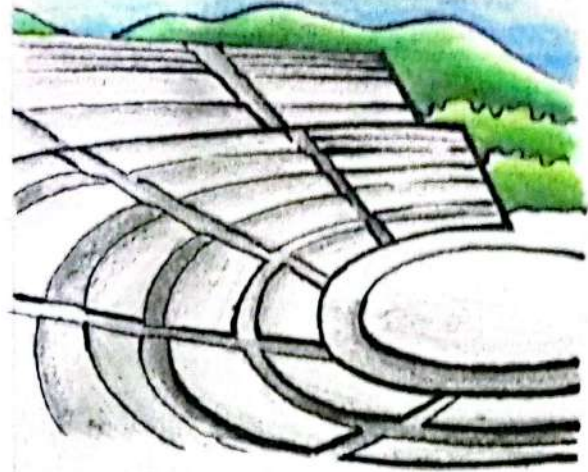


FIGURE 57.1: THEATER OF EPI DAUROS
ARCHITECT: POLYCLEITUS

FIGURE 57.2: FLOOR PLAN OF THEATER OF EPI DAUROS.

PUBLIC BUILDINGS

1. AGORA — THE CENTER PUBLIC SPACE OF A POLIS.

THEATER OF DIONYSUS
CONSIDERED AS THE PROTO-TYPE OF ALL GREEK THEATER ACCOMODATING 18 000 SPECTATORS.

2. STOA — A LONG, COLONNADED BUILDING WHICH SERVES TO CONNECT PUBLIC MONUMENTS AND FOR SHELTER.

STOAS OF EUMENES, ACROPOLIS
STOA POIKILE, OLYMPIA
STOA OF ATALLOS II, ATHENS

3. PRYTANEON — A SENATE HOUSE THE CHIEF DIGNITARIES OF A POLIS OCCUPY.

PRYTANEIONS IN OLYMPIA, ATHENS, AND PRIENE.

4. BOULEUTERON — A COUNCIL HOUSE, COVERED MEETING PLACE OF THE DEMOCRATIC ALLEY-ELECTED COUNCILS.

5. ASSEMBLY HALLS — USED BY CITIZENS IN GENERAL ASSEMBLY. THERSILLION, MEGAPOLIS; ECCLESIASTERION, PRIENE.

6. ODEION — THEATER BUILDINGS USED MAINLY BY MUSICIANS IN THE PRESENTATION OF THEIR WORKS FOR COMPLETION AND FOR PUBLIC APPROVAL.

7. STADIUM OR STADIO — FOOT RACE COURSE AND ALSO USED FOR OTHER ATHLETIC PERFORMANCES.

10 MAY 2025

FIGURE 58.1 THE CARYATID
OF ERECTHEION.



FIGURE 58.2: THE CANEPHORA.



5

ROMAN ARCHITECTURE

CLASSICAL ARCHITECTURE EXTENDS DURING THE RISE OF THE ROMANS. AN OUTBURST OF INTEGRATION OF GREEK AND HELLENISTIC CULTURE HAS BEEN ADAPTED BY THIS CIVILIZATION. DEVELOPING MORE ADVANCED STRUCTURES ACCOMODATING GREATER NUMBER OF PEOPLE AND THEIR NEEDS AS WELL AS SUSTAINING THE KINGDOM'S REIGN FOR OVER 1 200 YEARS.



FIGURE 59: THE COLOSSEUM AT ROME, ITALY. BUILT BY THE ANCIENT ROMANS IN 72 AD.

GEOGRAPHY

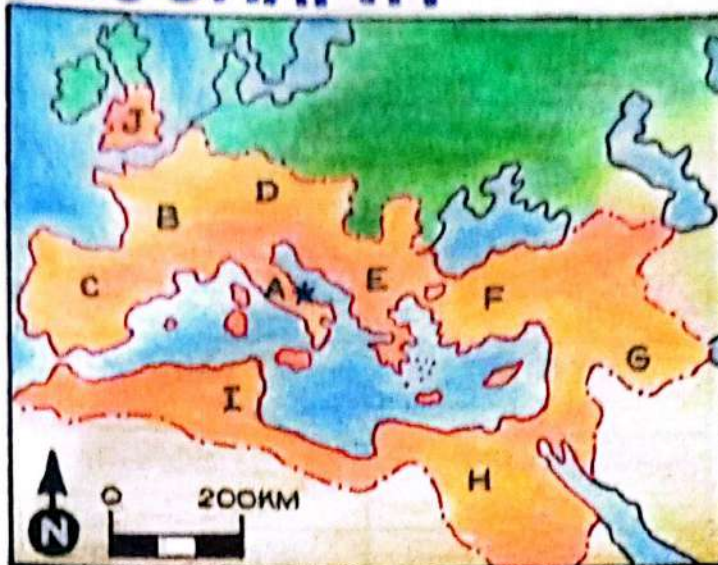


FIGURE 60: MAP OF THE ROMAN EMPIRE AT ITS MAXIMUM EXTENT IN 117 A.D.

LEGEND:

- ★ CAPITAL CITY ROME (PRESENT)
- ROMAN EMPIRE BORDER
- A CENTRAL ROMAN EMPIRE
- B GAUL
- C IBERIA
- D CELTS
- E GREECE
- F ASIA MINOR
- G WEST ASIA
- H EGYPT
- I CARTHAGE
- J ENGLAND

- ROME, IN THE PRESENT, IS KNOWN AS ITALY'S CURRENT CAPITAL CITY
- THE ITALIAN PENINSULA IS ONE OF THE FOUR PENINSULAS OF MEDITERRANEAN SEA.
- THE STRATEGIC GEOGRAPHY OF ITALY IS ONE OF THE FACTORS WHY THE ROMAN EMPIRE STOOD FOR ABOUT A MILLENNIUM.

FOR INSTANCE, THE JAGGED ALPS MOUNTAINS OF THE NORTH IMPOSES A CHALLENGING JOURNEY FOR BARBARIC INVADERS TO CONQUER ROME. WHEREAS THE CYCLONE-PRODUCING MEDITERRANEAN SEA THAT IS SURROUNDING THE PENINSULA ACTUALLY HELPED THE ROMANS DEFEAT AND CONQUER THE KINGDOM OF CARTHAGE DURING THE PUNIC WARS.

- THE SHAPE OF THE ITALIAN PENINSULA WAS ROOTED FROM THE LATIN WORD /ITALUS, WHICH TRANSLATES TO "BOOTS" FOR ITS RESEMBLANCE TO ONE.

CLIMATE

- NORTHERN ITALY AND TERRITORIES: RIGOROUS COLD TO RELAXING HEAT. THE COLD WEATHER WAS BROUGHT BY THE FROZEN PEAKS OF THE ALPS MOUNTAINS DURING WINTER.
- CENTRAL ITALY: SLIGHTLY TROPICAL.
- SOUTHERN ITALY: THE TROPICAL CLIMATE MAKES THIS AREA PRONE TO TROPICAL CYCLONES BEING FORMED IN THE MEDITERRANEAN SEA.

RELIGION

- LIKEWISE THE FIRST TWO CIVILIZATIONS, ROMANS ARE POLYTHEISTIC.
 - ROMAN MYTHOLOGY SLOWLY DERIVED ATTRIBUTES FROM THOSE OF GREEK GODS.
- EXAMPLE:

GREEK NAME	ROMAN NAME	ROLES
ZEUS	JUPITER	KING OF GODS, GOD OF SKY AND WEATHER.
HERA	JUNO	GODDESS OF MARRIAGE
POSEIDON	NEPTUNE	GOD OF SEA, EARTH - QUAKES, AND HORSES
DEMETER	CERES	GOD OF AGRICULTURE AND GRAIN.
HESTIA	VESTA	GODDESS OF HEARTH AND HOME
APHRODITE	VENUS	GODDESS OF LOVE AND BEAUTY.
HEPHAESTUS	VULCAN	GOD OF METALWORKS AND FIRE
ARES	MARS	GOD OF WAR
HERMES	MERCURY	GOD OF MESSENGERS AND TRADES.
APOLLO		GOD OF MUSIC, PROPHECY, AND HEALING
ATHENA	MINERVA	GODDESS OF WISDOM, WAR, AND CRAFT.
ARTEMIS	DIANA	GODDESS OF HUNTING
HADES	PLUTO	GOD OF THE UNDER - WORLD.

HISTORY

THE LEGEND OF ANCIENT ROME IS MOSTLY ASSOCIATED WITH THE TWO DEMIGOD TWINS: REMUS AND ROMULUS. THEIR BIOLOGICAL PARENTS WERE RHEA AND THE GOD OF WAR, MARS. RAISED BY A MYTHICAL ANIMAL NAMED SHE WOLF, THEN ADOPTED BY AMULIUS AND FAUSTULUS.

AMULUS ORDERED THE INFANTS DROWNED IN THE TIBER RIVER, BUT THE TROUGH IN WHICH THEY WERE PLACED FLOATED DOWN THE RIVER AND CAME TO REST AT THE SITE OF THE FUTURE ROME.

AS THEY GREW UP, THE TWINS DECIDED TO BUILD A KINGDOM. EVENTUALLY, ROMULUS ATTEMPTED TO KILL HIS TWIN OUT OF EGO AND RULED THE KINGDOM HIMSELF.

ARCHAEOLOGICAL RECORDS STATE THAT THE KINGDOM OF ROME WAS FOUND BY KING ROMULUS ON APRIL 21, 753 BCE.

THE ENTIRE HISTORY OF ROME IS SUBDIVIDED INTO THREE PERIODS ACCORDING TO THE MAJOR SHIFTING OF ITS GOVERNMENT STATUS AS REPRESENTED ON THE TIMELINE:

753
BCE**ROMAN KINGDOM (21 APR 753 BCE – 510 BCE)**

- STARTED FROM EARLY SETTLEMENTS SITUATED IN NORTHERN ITALY, KNOWN AS ETRUSCANS.
- RULED BY KINGS, STARTING FROM KING ROMULUS.
- OTHER (MYTHICAL) KINGS:
 1. NUMA POMPILIUS
 2. TULUS HOSTILIUS
 3. ANCUS MARCIUS
 4. LUCIUS TARQUINIUS PRISCUS
 5. SERVIUS TULLIUS
 6. LUCIUS TARQUINIUS SUPERBUS

509
BCE**ROMAN REPUBLIC (509 BCE – 27 BCE)**

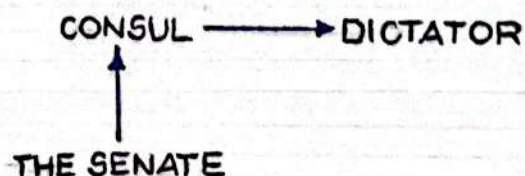
- FOUNDATION OF THE ROMAN REPUBLIC.
- ROMAN SOCIAL CLASS ARE CLASSIFIED INTO TWO CATEGORIES:
 1. PATRICIANS — WEALTHY NOBLES.
 2. PLEBEIANS — MIDDLE AND LOWER CLASS.

494
BCE

- CIVIL WAR BETWEEN PATRICIANS AND PLEBEIANS.
RESULT: THE PLEBEIANS WON AND GAINED RIGHTS, UPRI-
SING THEIR SIGNIFICANCE IN THE REPUBLIC.

450
BCE

- THE TWELVE TABLES WAS COMPILED. THIS IS KNOWN IN THE PRESENT AS THE SENATE, WHERE 12 SENATORS ARE ELECTED TO MAKE LAWS.
- THE CONSUL IS THE HIGHEST OFFICIAL RANK.



- THE SENATE ADVISES THE CONSUL IN IMPLEMENTING A LAW IN WHICH THE CONSUL WHETHER APPROVE IT OR NOT THROUGH ITS DICTATOR.

264
BCE

- THE PUNIC WARS EMERGED — A CONFLICT BETWEEN THE ROMAN REPUBLIC AND THE KINGDOM OF CARTHAGE.
- THE FIRST PUNIC WAR EMERGED BETWEEN THE CLAIM OF THE ISLANDS OF SARDINIA AND SICILY.
RESULT: ROME SUCCESSFULLY CONQUERED THE ISLANDS

IN 227 BCE.

- THE SECOND PUNIC WAR STARTED IN 218 BCE WHEN HANNIBAL, A CARTHAGENIAN GENERAL ATTEMPTED TO AMBUSH THE ROMANS BY CAPTURING THEM ON THE ALPS MOUNTAINS.

RESULT: IN 202 BCE, HANNIBAL SURRENDERED WHEN THEY WERE CAPTURED BY THE ROMANS IN ZAMA.

- THE LAST PUNIC WAR STARTED IN 157 BCE BUT A STORM GREATLY AFFECTED THE CARTHAGENIAN WAR SUPPLIES. WHEREAS THE ROMANS USED AND REINVENTED STRANDED CARTHAGENIAN WARSHIPS, KNOWN AS QUINQUEREME, TO DEFEAT CARTHAGE FOR GOOD.

RESULT: CARTHAGE DECLINED AND SURRENDERED IN 146 BCE. BECAME A TERRITORIAL TRADING CITY IN 122 BCE.

100
BCE

- ON JULY 12TH, 100 BCE, GAIUS JULIUS CAESAR WAS BORN. HE IS THE FOUNDER OF THE ROMAN EMPIRE.

- HE STARTED AS A GENERAL IN 72 BCE, AND BECAME A DICTATOR IN 44 BCE.

60
BCE

- THE FIRST TRIUMVIRATE BETWEEN CAESAR, CRASSUS, AND POMPEII, ENDED IN 53 BCE.

44
BCE

- CAESAR WAS ASSASSINATED BY LUCIUS BRUTUS AND CASIUS IN THE IDES OF MARCH. DATED MARCH 15, 44 BCE.

- THE SECOND TRIUMVIRATE ROSE BETWEEN MARK ANTHONY, OCTAVIAN, AND LEPIDUS IN 43 BCE.

27
BCE

- "ROMAN PEACE", ALSO KNOWN AS PAX ROMANA, WAS ACHIEVED UNDER THE RULE OF AUGUSTUS.

- THE ROMAN REPUBLIC CONCLUDED.

ROMAN EMPIRE (27 BCE — 476 AD)

23
BCE

- ANCIENT ROME UNDER THE RULE OF EMPERORS; AUGUSTUS BEING THE FIRST AMONG THE PRINCIPATE EMPERORS.

- PAX ROMANA FLOURISHED UNTIL 180 AD.

14
AD

- THE PRINCIPATE EMPERORS:

1. AUGUSTUS (27 BCE — 14 AD)
2. TIBERIUS (14 AD — 37 AD)
3. CALIGULA (37 AD — 41 AD)
4. CLAUDIUS (41 AD — 52 AD)
5. NERO (52 AD — 68 AD)

68
AD

- YEAR OF THE FOUR EMPERORS:

- | | |
|----------|--------------|
| 1. GALBA | 3. VITELLIUS |
| 2. OTHO | 4. VESPASIAN |

79
AD

- ELECTED AND REPLACED ONLY AFTER 3-4 MONTHS.

- THE FLAVIAN EMPERORS:

1. TITUS
2. DOMITIAN

- THE COLLOSSEUM WAS BUILT IN 72 AD. MAINLY USED IN GLADIATOR.

117
AD

- ROMAN EMPIRE EXTENDS TO ITS MAXIMUM. INFLUENCING THE ENGLISH AND CELTS IN THE NORTH, AND WEST ASIA IN THE EAST.

- TRAJAN IS THE ACTING EMPEROR.

235
AD

- THE THIRD CENTURY CRISIS — THE EMPIRE'S DARK AGE. POLITICAL STRIFFE, INVASION ATTEMPTS, AND PLAGUES THAT ALMOST ENDED THE EMPIRE'S REIGN.

306
AD

- CONSTANTINIAN EMPERORS IN THE EAST. (306 AD — 1453 AD)

312
AD

- CONSTANTINE I CONVERTED RELIGION INTO CHRISTIANITY. LEADING TO THE DEVELOPMENT OF TWO RELIGIOUS INFLUENCES LATER IN THE MIDDLE AGES.

1. CHRISTIANITY — WEST ROMAN EMPIRE.
2. EASTERN ORTHODOX — EAST ROMAN EMPIRE.

476
AD

- THE WESTERN ROMAN EMPIRE FELL IN THE HANDS OF SEVERAL BARBARIC GROUPS.
- THE FALL OF THE ROMAN EMPIRE MARKS THE BEGINNING OF THE MIDDLE AGES.

CHARACTER

ETRUSCAN ARCHITECTURE (EARLY ROMAN) IS CHARACTERIZED BY ANCIENT GREEK INFLUENCES COMBINED WITH UNIQUE, ETRUSCAN INNOVATION.

1. DEEP FRONT PORCHES.
2. PILLARED ENTRYWAYS. (AND PORCHES)
3. FRESCO PAINTINGS OR MURALS.
4. GRID STYLE URBAN DESIGN.

ROMAN ARCHITECTURE IS CHARACTERIZED BY MONUMENTALITY; IT DISPLAYS A SENSE OF POWER, PERMANENCE, AND ELEGANCE, AND IT REPRESENTS THE TRIUMPHS OF THE ROMAN EMPIRE:

1. MONUMENTALITY — LARGE-SCALE ROMAN CONSTRUCTIONS

THAT DEMONSTRATE THE SPLENDOR OF THE ROMAN EMPIRE. ROMAN ARCHITECTURE ASPIRED TO IMPRESS AND TRANSMIT DOMINANCE.

2. SYMMETRY AND PROPORTION — THROUGH THE USE OF SYMMETRICAL PATTERNS AND PRECISE PROPORTIONS, ROMAN ARCHITECTURE PROMOTED HARMONY AND BALANCE, RESULTING IN A BEAUTIFUL SENSE OF STYLE.

3. EMPHASIS ON COLUMNS AND ORDERS — ROMAN ARCHITECTURE DREW FROM GREEK TRADITIONS, UTILIZING COLUMNS AND ORDERS SUCH AS THE DORIC, IONIC, AND CORINTHIAN ORDERS TO:

- (1) SUPPORT STRUCTURES AND ADD ELEGANCE TO FAÇADES;
- (2) DEVELOPING THE REMAINING TWO ARCHITECTURAL ORDERS: TUSCAN AND COMPOSITE.

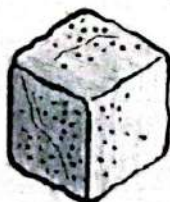
4. USE OF CONCRETE AND BRICKS — ROMANS SHOWCASED THEIR INVENTIVE USE OF BUILDING MATERIALS BY MASTERING THE USE OF CONCRETE, WHICH ENABLED EFFECTIVE CONSTRUCTION AND DURABILITY WHEN PAIRED WITH BRICKS AND STONES.

5. ORNATE DECORATION — ROMAN ARCHITECTURE HAD ELABORATE ORNAMENTAL DETAILS INCLUDING CARVINGS, MOSAICS, FRESCOS AND SCULPTURES THAT ENHANCED THE APPEAL OF BOTH THE FAÇADE AND THE INTERIOR OF THE STRUCTURES.

6. PUBLIC SPACES AND INFRASTRUCTURES — AMPHITHEATERS, BASILICAS, FORUMS, BATHS, AQUEDUCTS, AND ROAD NETWORKS WERE BUILT BY THE ROMANS TO SUPPORT GATHERINGS, TRADE, INFRASTRUCTURAL REQUIREMENTS, AND LEISURE ACTIVITIES.

7. ADVANCED ENGINEERING TECHNIQUES

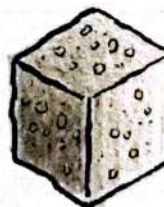
MATERIALS



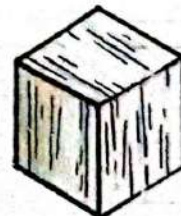
61.1: STONE



61.2: TUFA



61.3: PEPERINO



61.4: TRAVERTINE



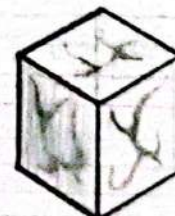
61.5: OBSIDIAN



61.6: SAND



61.7: GRAVEL



61.8: MARBLE

FIGURE 61.1–8: RAW MATERIALS USED IN ROMAN ARCHITECTURE.

MATERIALS USED WITH CONSTRUCTION TECHNIQUES:

1. **CONCRETE** — DISCOVERED BY THE ETRUSCANS IN 300 AD—400 AD. USED IN ALL TYPES OF STRUCTURES PARTICULARLY STONE STRUCTURES TOGETHER BUILT WITH BRICKS AND MORTAR.
2. **POZZOLANA** — A THICK VOLCANIC EARTH MATERIAL USUALLY MIXED WITH STONE BRICK RUBBLE TO PRODUCE A STURDY MORTAR.
3. **BRICK** — MORE DEFINED IN FORM AND ARRANGEMENT THAT IS CATEGORIZED INTO DIFFERENT CONSTRUCTION SYSTEMS.

CONSTRUCTION SYSTEM

- ADAPTED COLUMNAR AND TRABEATED STYLE OF THE GREEKS.
- ARCHES AND VAULT SYSTEM WAS INTRODUCED BY THE ETRUSCANS— COMBINED USE OF COLUMN, BEAM, AND ARCH. (ARCUATED)
- THE ROMANS, BY THEIR EXTENDED USE OF CONCRETE, FOUNDED A NEW CONSTRUCTIONAL SYSTEM AND EMPLOYED IT IN THE MOST DIVERSE SITUATIONS.
- USES OF CONCRETE:
 - A. UNFACED CONCRETE ARE USED FOR FOUNDATIONS.
 - B. FACED CONCRETE ARE USED FOR WALLS.

OPUS INCERTUM

- THE OLDEST KIND OF CONSTRUCTION TECHNIQUE. INTRODUCED DURING THE LATE 2ND CENTURY B.C.E.
- CHARACTERIZED BY CONCRETE BACKING STUDDED WITH IRREGULAR SHAPED PIECES OF TONAL STONE.

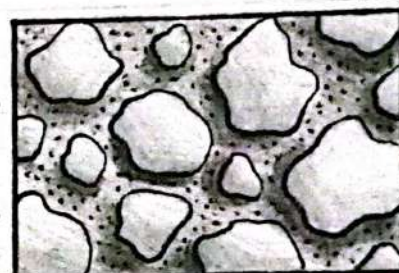


FIGURE 62.1: OPUS INCERTUM TECHNIQUE.

OPUS RETICULATUM

- INTRODUCED AROUND 170—150 BCE.
- CHARACTERIZED BY THE NET MESHES RESEMBLANCE (RETICULATUM)
- EMPLOYS DIAMOND SHAPED PIECES OF TUFO KNOWN AS CUBILLIA THAT ARE PLACED WITHIN A CORE OF CONCRETE.

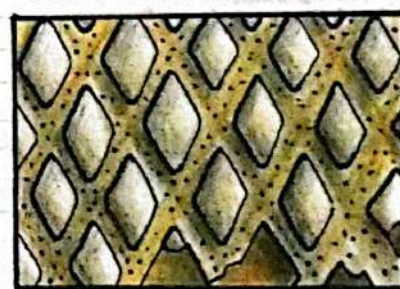


FIGURE 62.2: OPUS RETICULATUM TECHNIQUE.

OPUS TESTACEUM

- ALSO KNOWN AS OPUS LATERICIUM. INTRODUCED IN THE 1ST CENTURY B.C.E.
- CHARACTERIZED BY THE USE OF BRICK-AND TILE-FACED CONCRETE WITH DIMENSIONS 1.5 IN (3.81 CM) THICK AND 6.5 IN (16.51 CM) LONG.
- BECAME THE MOST COMMON CONSTRUCTION TECHNIQUE EMPLOYED EVEN AFTER THE FALL



FIGURE 62.3: OPUS TESTACEUM TECHNIQUE.

OF THE EMPIRE AND IN THE MIDDLE AGES.

OPUS VITTATUM

- "BANDED WORK" IN ENGLISH, INTRODUCED IN THE 4TH CENTURY AD. OTHER TERMS ARE ASSOCIATED SUCH AS OPUS LISTATUM.
- ROMAN CONSTRUCTION TECHNIQUE CHARACTERIZED BY PARALLEL COURSE OF TUFF ALTERNATED WITH BRICKS.

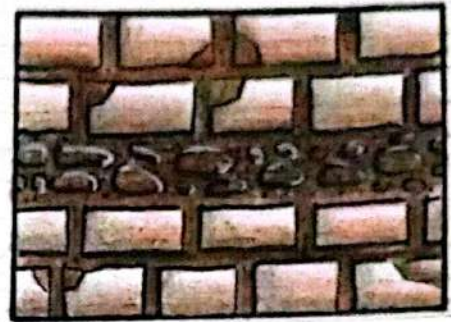


FIGURE 62.4: OPUS VITTATUM TECHNIQUE.

OPUS MIXTUM

- ROMAN CONSTRUCTION TECHNIQUE KNOWN AS THE COMBINATION OF TWO OR MORE CONSTRUCTION TECHNIQUES.
- SOME IDEAL "MIXED WORK"
 - (1) OPUS RETICULATUM AND OPUS TESTACEUM
 - (2) OPUS TESTACEUM AND OPUS VITTATUM.
- COMMON DURING THE REIGN OF FLAVIAN EMPERORS (70 - 117 AD).
- OTHER TERMS ASSOCIATED: OPUS VAGECUM AND OPUS COMPOSITUM.

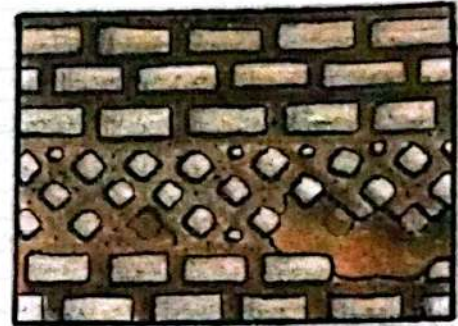


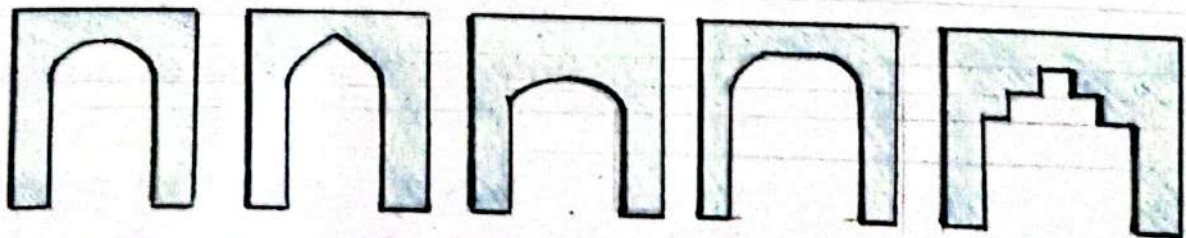
FIGURE 62.5: OPUS MIXTUM TECHNIQUE SHOWING THE COMBINATION OF OPUS TESTACEUM AND OPUS RETICULATUM.

ARCHES AND VAULTS

ARCHES ARE CURVED, SYMMETRICAL STRUCTURE SPANNING AN OPENING, TYPICALLY SUPPORTING THE WEIGHT OF A BRIDGE, ROOF, OR A WALL ABOVE IT.

VAULT IS A STRUCTURAL FORM USED FOR SUPPORT AND CREATED WITH MULTIPLE ARCHES.

KIND OF ARCHES:



63.1: SEMI-CIRCULAR 63.2: POINTED 63.3: SEGMENTAL 63.4: BUCKET 63.5: CORBELLED

FIGURES 63.1-5: KINDS OF ARCHES.

KINDS OF VAULTS:

64.1: SEMICIRCULAR

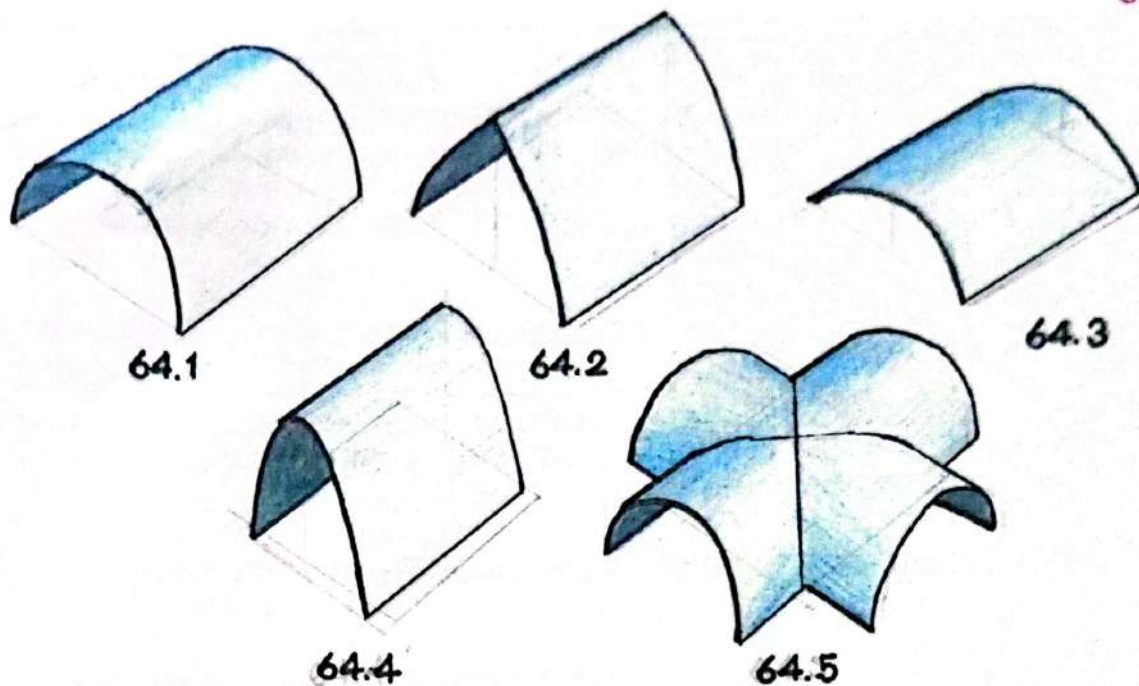
64.2: POINTED

64.3: SEGMENTAL

64.4: CATENARY

64.5: GROIN OR CROSS

FIGURES 64.1-5: KINDS OF VAULT (SEE ON PAGE 59)



DECORATIONS AND INTERIOR DESIGN

- USES MANY COLORED MARBLES.
- CEMENT AND STUCCOES (OPUS ALBARUM) USED FOR WALL COVERINGS, BOTH INTERNAL AND EXTERNAL WALLS.
- MURAL PAINTINGS ARE CLASSIFIED INTO:

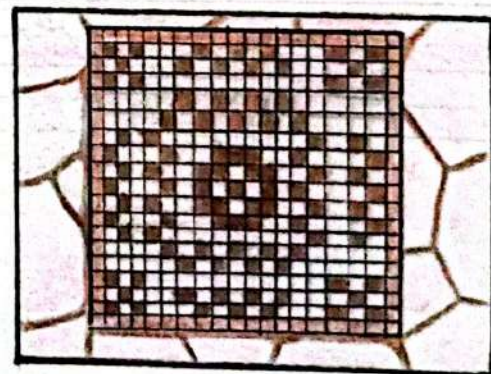
1. FRESCO PAINTING
2. TEMPERA PAINTING
3. VARNISH PAINTING
4. CAUSTIC PAINTING

- MOSAIC — THOUSANDS OF SMALL STONES OR GLASS TILES SET IN MORTAR TO FORM A PATTERN. THEY SHOW DEPICTION OF ROMAN LIFE.
 - MOSAICS ARE USED FOR ORNAMENTING WALLS, VAULTS AND FLOORS.
 - TECHNIQUES OF MAKING ROMAN MOSAICS:

OPUS TESSELLATUM

- MOSAIC TECHNIQUE USED COMMONLY IN HELLENISTIC AND ROMAN STRUCTURES.
- CHARACTERIZED BY SQUARE TESSERAE OF STONE, MARBLE, OR GLASS.

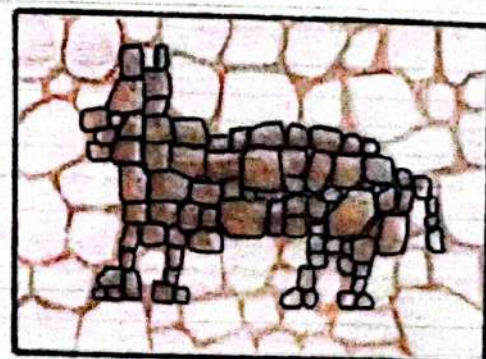
FIGURE 65.1: OPUS TESSELLATUM MOSAIC TECHNIQUES



OPUS SCUTULATUM

- ALSO KNOWN AS OPUS SECTILE. A MOSAIC TECHNIQUE CHARACTERIZED BY A TESSERAE OF MARBLES, PORPHYRY, OR GLASS CUT INTO SHAPES TO FORM A PATTERN.
- USUALLY, CHUNKS ARE IN IRREGULAR SHAPES AND ALMOST RECTANGULAR.

FIGURE 65.2: OPUS SCUTULATUM MOSAIC TECHNIQUES.



OPUS SPICATUM

- A MOSAIC AND MASONRY CONSTRUCTION TECHNIQUE CHARACTERIZED BY PLACING BRICKS, MARBLE TILES, OR CUT STONE IN A HERRING BONE MANNER. (SEE FIGURE 65.3)
- "SPIKED WORK" WHEN TRANSLATED TO ENGLISH.
- INTRODUCED BY ROMANS AROUND 150 AD AND USED UNTIL THE MIDDLE AGES.
- ROMANS ALSO USED MARBLES, ABALASTER, PORPHYRY, AND JASPER AS WALL LINING.

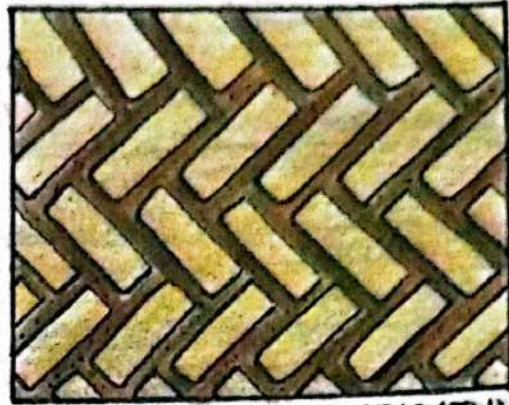


FIGURE 65.3 : OPUS SPICATUM MOSAIC AND MASONRY TECHNIQUE.

ORDERS OF ROMAN ARCHITECTURE :

ROMANS USED ORDERS OF GREEK ARCHITECTURE AS DECORATIVE FEATURE WHICH CAN BE OMITTED, DEVELOPING THEIR OWN COLUMN ORDERS.

TUSCAN ORDER

- CLASSICAL ORDER OF ROMAN ORIGIN.
- KNOWN AS THE SIMPLIFIED ROMAN DORIC ORDER.
- CHARACTERIZED BY UNFLUTED COLUMN SHAFT AND A SIMPLIFIED BASE.
- CAPITAL AND ENTABLATURE HAVING NO DECORATION OTHER THAN MOLDINGS.

PARTS :

1. CORNICE — UPPERMOST MEMBER OF A CLASSICAL ENTABLATURE, CONSISTING TYPICALLY OF A CYANTUM, CORONA, AND BED MOLDING.
2. FRIEZE — HORIZONTAL PART OF A CLASSICAL ENTABLATURE, BETWEEN THE CORNICE AND ARCHITRAVE, OFTEN DECORATED WITH SCULPTURE IN LOW RELIEF.
3. ARCHITRAVE — LOWERMOST DIVISION OF A CLASSICAL ENTABLATURE.

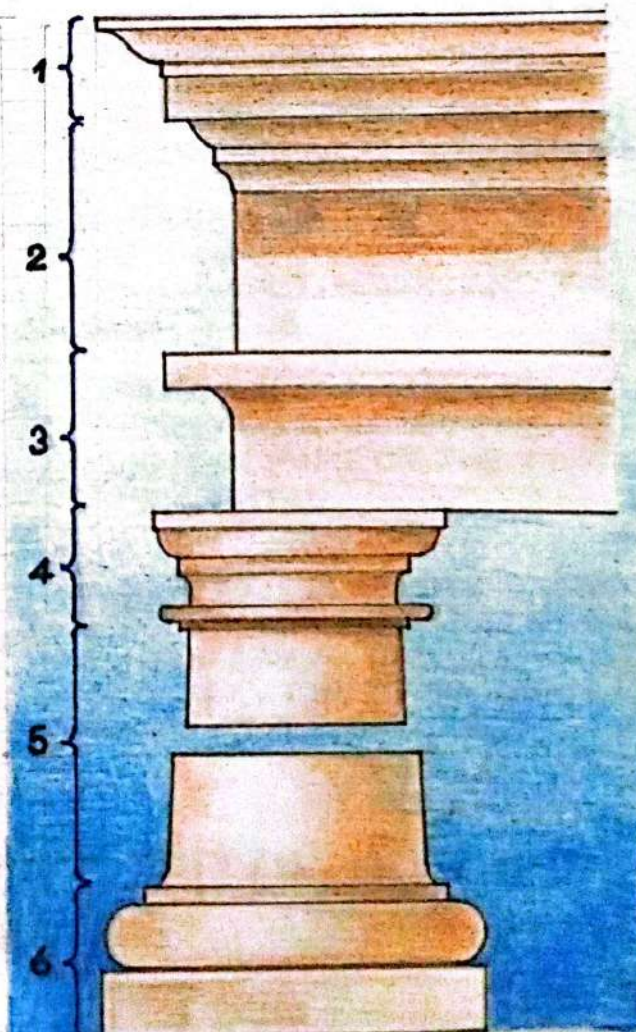
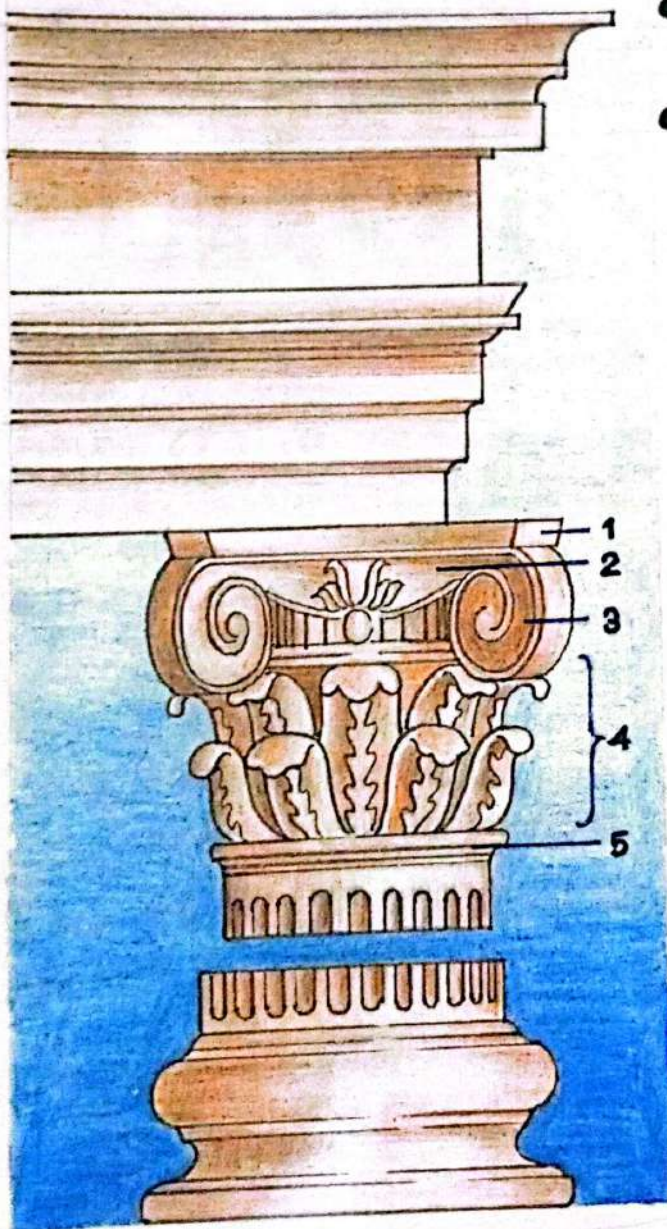


FIGURE 66: TUSCAN STYLE COLUMN.

RESTING DIRECTLY ON THE COLUMN CAPITALS AND SUPPORTING THE FRIEZE.

- 4. CAPITAL — DISTINCTIVELY TREATED, UPPER END OF A COLUMN, PILLAR, PIER, CROWNING THE SHAFT AND TAKING THE WEIGHT OF THE ENTABLATURE OR ARCHITRAVE.
- 5. SHAFT — THE CENTRAL PART OF A COLUMN OR PIER BETWEEN THE CAPITAL AND THE BASE.
- 6. BASE — LOWERMOST PORTION, USUALLY DISTINCTIVELY TREATED AND CONSIDERED AS AN ARCHITECTURAL UNIT.

COMPOSITE ORDER



- INVENTED BY THE ANCIENT ROMANS IN THE EARLY 1ST CENTURY AD.

- MODIFIED BY SUPERIMPOSING FOUR DIAGONALLY SET IONIC VOLUTES ON A BELL OF CORINTHIAN ACANTHUS LEAVES.

PARTS:

1. ABACUS — A FLAT SLAB FORMING THE TOP OF THE COMPOSITE COLUMN.

2. ECHINUS — PROMINENT CIRCULAR MOLDING.

3. VOLUTE — SPIRAL, SCROLL-LIKE ORNAMENT AS ON THE CAPITAL.

4. BELL — THE CORINTHIAN ORNAMENT CONSISTING OF THE ACANTHUS LEAVES, HELIX, AND THE CAULICULUS.

5. ASTRAGAL — A SMALL, CONVEX MOLDING LOCATED AT THE LOWERMOST PART OF THE COMPOSITE CAPITAL.

FIGURE 67: COMPOSITE STYLE COLUMN SHOWING THE INTEGRATION OF GREEK ORDERS, PARTICULARLY IONIC AND CORINTHIAN STYLE COLUMN.

THE STRUCTURES:

TEMPLE OF JUPITER CAPITOLINUS MAXIMUS ROME, ITALY

- ETRUSCAN ARCHITECTURE
- BUILT IN 509 BCE, MAY HAVE BEEN THE FIRST TEMPLE BUILT

BY THE ETRUSCANS DEDICATED TO THEIR GOD: JUPITER.

- IT WAS SURROUNDED BY THE AREA CAPITOLINA, A PRECINCT WHERE SHRINES, STATUES, AND VICTORY TROPHIES ARE DISPLAYED.
- ETRUSCAN SPECIALIST HAVE BROUGHT IN FOR VARIOUS ASPECTS OF ITS CONSTRUCTION, INCLUDING THE MAKING AND PAINTING OF ANTI-FIXES AND OTHER TERRACOTTA DECORATION.

STATUS: FIRST AND ORIGINAL TEMPLE WAS BURNED DOWN IN 83 BCE, REITERATED IN 69 B.C.E. BUT LATTER WARS SHOWED EVIDENCE THAT IT WAS RECONSTRUCTED SEVERAL TIMES UNTIL IT BECAME A PRESERVED RUINS IN THE PRESENT.

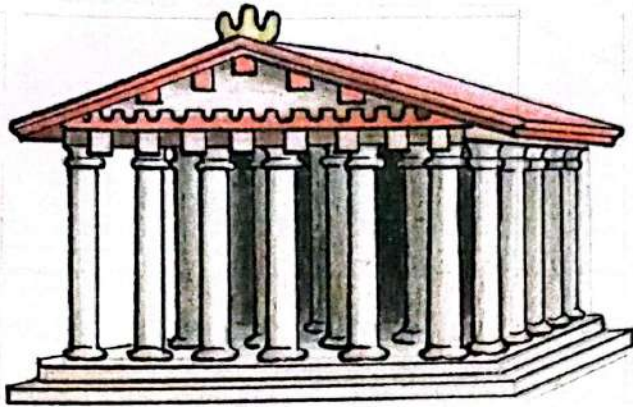
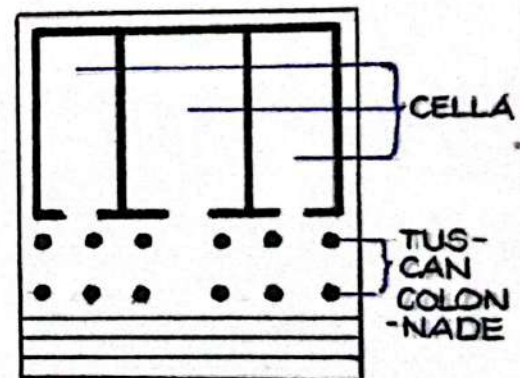


FIGURE 68.1: SPECULATED MODEL OF THE TEMPLE OF JUPITER CAPITOLINUS MAXIMUS.



FIGURE 68.2: FRONT ELEVATION OF THE TEMPLE OF JUPITER CAPITOLINUS MAXIMUS ACCORDING TO THE SPECULATED MODEL OF VITRUVIUS.

FIGURE 68.3: (ON THE RIGHT) FLOOR PLAN OF THE TEMPLE OF JUPITER CAPITOLINUS MAXIMUS AS DESCRIBED BY VITRUVIUS.



- THE CELLA WAS DIVIDED INTO THREE CHAMBERS CONTAINING STATUES OF:

1. JUPITER (ZEUS)
2. MINERVA (ATHENA)
3. JUNO (HERA)

TEMPLE OF VENUS AND ROME ROME, ITALY

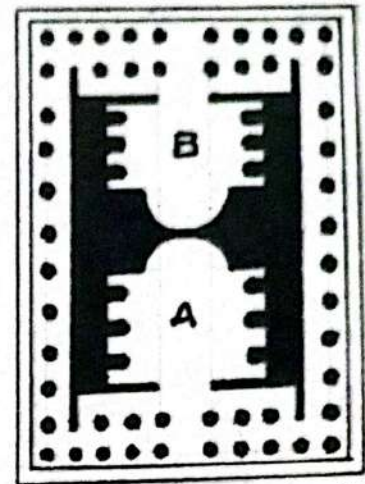
● ROMAN ARCHITECTURE

- PLANNED AND DESIGNED BY HADRIAN IN 54 BCE IN HONOR TO THE GODDESS VENUS FELIX AND ROMA AETERNA, MAY HAVE BEEN THE LARGEST TEMPLE IN ANCIENT ROME.
- OPENED TO THE PUBLIC IN 135 AD AS ONE OF THE STRUCTURES INSIDE THE ROMANUM FORUM.
- THE TEMPLE COMPRISED OF TWO ADJOINING CELLAE THAT SERVED AS CULT TEMPLES FOR THE DEDICATED ROMAN GODS.
- ACCORDING TO FRENCH ARTIST LÉON VAUDOYER IN 1830, THE FAÇADE CONSISTS OF DECASTYLE CORINTHIAN COLUMNS WITH THE NAME OF HADRIAN, AS THE DESIGNER, CARVED ON THE FRIEZE IN LATIN.

STATUS: BURNED DOWN IN 807 AD, BUT WAS RESTORED IN "MAGNIFICENT MANNER" BY MAXENTIUS UNTIL IT WAS FINALLY ROCKED BY AN EARTHQUAKE IN 847 AD.



FIGURE 69.1: (LEFT) FACADE OF THE TEMPLE OF VENUS AND ROME AS ILLUSTRATED BY FRENCH ARTIST LÉON VAUDOYER (1830)



LEGEND:

- A. CELLA OF VENUS FELIX
- B. CELLA OF ROMA AETERNA

FIGURE 69.2: (RIGHT) FLOOR PLAN OF THE TEMPLE OF VENUS AND ROME AS SUGGESTED.

MAISON CARRÉE NÎMES, FRANCE

- ONE OF THE BEST-PRESERVED ROMAN RECTANGULAR TEMPLES. A MID-SIZED AUGUSTAN PROVINCIAL TEMPLE OF THE IMPERIAL CULT, A CAESAREUM.
- A 17-METER HIGH, PSEUDO-PERIPTERAL, HEXASTYLE TEMPLE BUILT IN 16 BCE AND OPENED IN 2 AD.

STATUS: STANDING STILL. A UNESCO WORLD HERITAGE SITE AS OF 2023.

FIGURE 70: MAISON CARRÉE IN NÎMES, FRANCE.



THE PANTHEON ROME, ITALY

- ONE OF THE BEST EXAMPLE OF ROMAN ARCHITECTURE IN TERMS OF TEMPLES.
- ANOTHER TYPE OF ROMAN TEMPLE: CIRCULAR TEMPLE.
- BUILT AROUND 27 AND 25 BCE BY AGRIPPA, DEDICATED TO THE 12 ROMAN GODS AND THE LIVING SOVRAN.
- RECONSTRUCTED BY HADRIAN AROUND 118 AND 125 AD DUE TO MINOR DAMAGES CAUSED BY CIVIL WARS.
- ALSO ASSOCIATED AS BASILICA OF ST. MARY AND THE MARTYR'S.

ROTUNDA SINCE 609 AD, TOGETHER WITH THE PANTHEON OBELISK IN FRONT OF IT.

- ROUND IN PLAN, EXCEPT FOR THE PORTICO CONSISTING AN OCTA-STYLE, CORINTHIAN COLONNADE UNDER A PEDIMENT. A VESTIBULE LINKS THE PORCH TO THE ROTUNDA, UNDER THE CIRCULAR, COFFE-RED, CONCRETE DOME.
- THE DOME HAS A CENTRAL OPENING CALLED OCULUS TO THE SKY. FOR ALMOST 2000 YEARS SINCE IT WAS BUILT, PANTHEON'S DOME REMAINS AS THE LARGEST CONCRETE DOME THAT IS UNREINFORCED, WITH A DIAMETER OF 43 METERS.

STATUS: A STATE PROPERTY OF ITALY'S MINISTRY CULTURAL HERITAGE. MAY HAVE TURNED 2000 YEARS OLD IN 2025 OR 2027.



FIGURE 71.1: FRONTELEVATION OF THE PANTHEON.

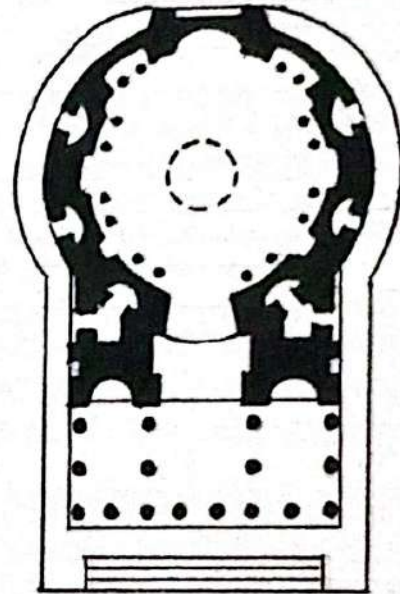


FIGURE 71.2: FLOOR PLAN OF THE PANTHEON

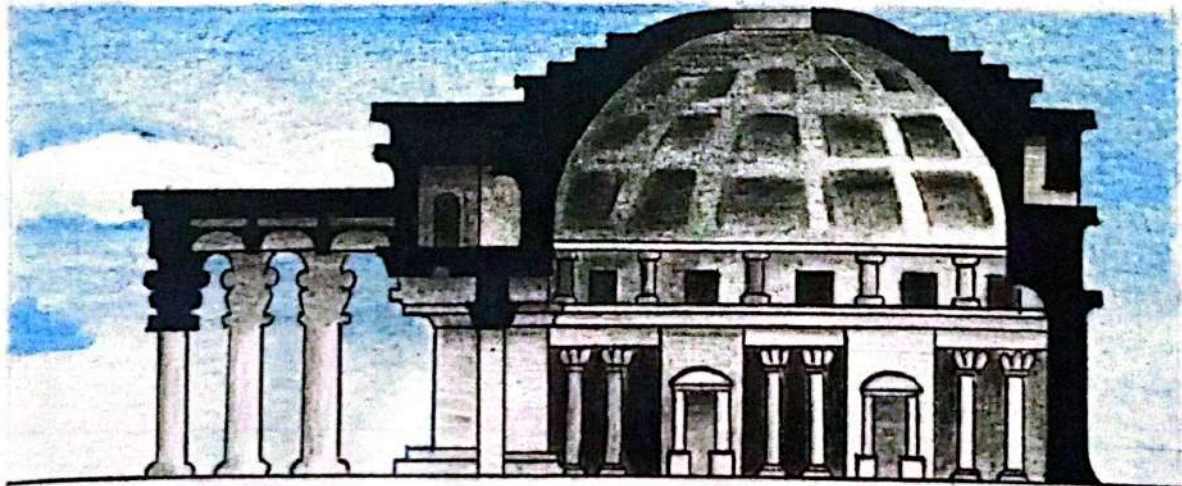


FIGURE 71.3: SECTION PLAN OF THE PANTHEON.

FORUM

- AN OPEN SPACE IN A ROMAN TOWN USED AS A CENTRAL GATHERING PLACE FOR BOTH CIVIC AND RELIGIOUS EVENTS.
- IT SERVES AS THE HEART OF CIVIC LIFE, SURROUNDED BY IMPORTANT BUILDINGS FOR GOVERNMENT AND RELIGION.

- CHARACTERIZED BY WELL-PLANNED STRAIGHT STREETS CROSSING THE TOWN ON A GRID PATTERN.

- THE GREAT ROMAN FORA:

1. FORUM ROMANUM — BUILT AROUND 7TH CENTURY BCE IN ROME, ITALY AND INTEGRATED UNTIL THE 6TH CENTURY AD.

— THE LARGEST ROMAN FORUM.

STATUS:

RUINS	_____	(1) TEMPLE OF VENUS AND ROME	(54 BCE)
RUINS	_____	(2) TEMPLE OF CAESAR	(29 BCE)
RUINS	_____	(3) TEMPLE OF SATURN	(497 BCE)
PRESERVED	_____	(4) ARCH OF TITUS	(81 AD)
PRESERVED	_____	(5) ARCH OF CONSTANTINE	(312 AD)

— KNOWN STRUCTURES INSIDE THE FORUM:

2. FORUM OF CAESAR — FOUNDED IN 46 BCE BY JULIUS CAESAR AS AN EXTENSION OF THE FORUM ROMANUM.

3. FORUM OF NERVA — FOUNDED IN 85 AD BY EMPEROR DOMITIAN, AN ANCIENT STRUCTURE KNOWN AS ONE OF THE ROMAN IMPERIAL FORA; SECOND TO THE LAST FORUM BUILT.

4. FORUM OF AUGUSTUS — BUILT BY AUGUSTUS IN 2 BCE. AS ONE OF THE IMPERIAL FORA OF ANCIENT ROME.

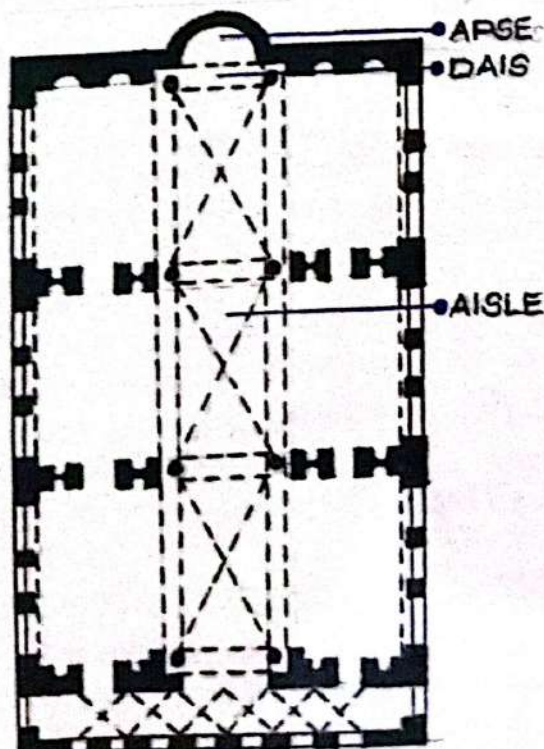
— KNOWN STRUCTURE: TEMPLE OF MARS ULTOR.

5. FORUM OF TRAJAN — THE LAST IMPERIAL FORUM BUILT BY TRAJAN IN 112 AD.

— ARCHITECT AND PLANNER: APOLLODORUS

6. FORUM OF VESPASIAN — AN IMPERIAL FORUM BUILT IN ORDER OF EMPEROR VESPASIAN IN 71 AD IN HONOR FOR THE GODDESS OF PEACE: PAX.

BASILICA OF CONSTANTINE ROME, ITALY



- A BASILICA IS A PUBLIC BUILDING USUALLY LONG AND RECTANGULAR IN PLAN, FEATURING SEMICIRCULAR SECTIONS ON THE EDGES CALLED APSES.

- VERSATILE PUBLIC STRUCTURES THAT SERVED THE CIVIC, JUDICIAL, AND RELIGIOUS NEEDS OF THE ROMANS.

- THE JUDGE WOULD SIT ON AN ELEVATED PLATFORM ON THE APSES CALLED DAIS WHERE LEGAL DECISIONS WERE MADE.

- BUILT IN 312 AD UNDER THE RULES OF EMPERORS MAXENTIUS AND CONSTANTINE. IT WAS THE LARGEST STRUCTURE IN THE FORUM ROMANUM AFTER THE TEMPLE OF VENUS AND ROME.

FIGURE 72: FLOOR PLAN OF THE BASILICA OF CONSTANTINE

STATUS: DESTROYED BY AN EARTHQUAKE IN THE 9TH CENTURY AD. ONLY A SHELL OF THE NORTHEASTERN AISLE IS REMAINING IN THE PRESENT.

THERMAE OF DIOCLETIAN ROME, ITALY

- A THERMAE OR PUBLIC BATH IS A CIVIC ROMAN STRUCTURE USED BY THE ROMANS TO KEEP THEIR BODY CLEAN.
- A SINGLE THERMAE CONSISTS OF THOUSANDS OF BATHERS WHICH BOTH MEN AND WOMEN CAN USE PUBLICLY.
- THE THERMAE OF DIOCLETIAN IS A PUBLIC BATH NAMED AFTER EMPEROR DIOCLETIAN, BUILT IN 298 AD.
- OPENED IN 308 AD UNTIL 537 AD WHEN THE OSTROGOTHS CUT OFF THE CONNECTION OF THE AQUEDUCTS TO THE FORUM, WHICH SERVED AS WATER SUPPLY.
- PARTS OF THE THERMAE:
 1. APODYTERIA—DRESSING ROOM
 2. LACONICUM—SWEAT ROOM; RUBBING WITH OIL.
 3. TEPIDARIUM—WARM BATH
 4. FRIGIDARIUM—COLD BATH
 5. UNCTUARIA—OILS AND PERFUMES ROOM.

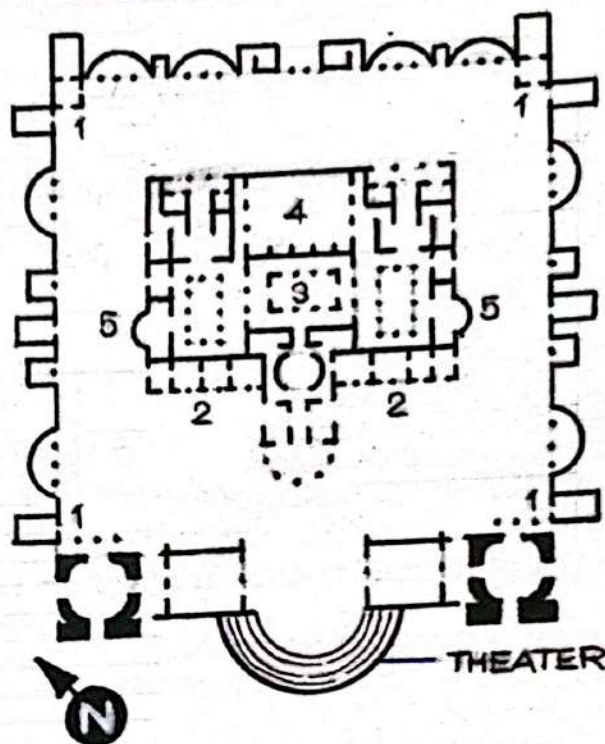


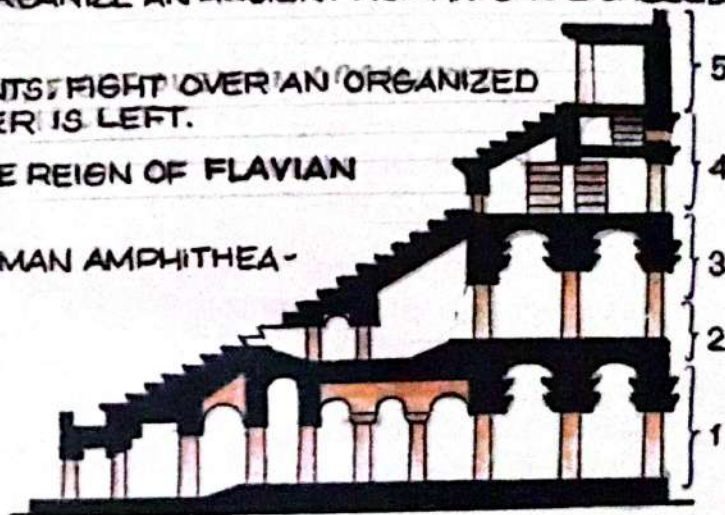
FIGURE 73: FLOOR PLAN OF THE THERMAE OF DIOCLETIAN.

STATUS: PARTIALLY RUINED. SOME PARTS ARE PRESERVED AND STILL USED. CAN BE ACCESSED THROUGH A MUSEUM.

OTHER RELATED STRUCTURE: THERMAE OF CARACALLA, ROME
— WITH 1600 BATHERS.

THE COLOSSEUM ROME, ITALY

- ROMAN THEATER AND AMPITHEATERS ARE MONUMENTAL CIVIC STRUCTURES USED MAINLY TO ORGANIZE AN ANCIENT ROMAN GAME CALLED GLADIATOR.
- WARRIORS, THE CONTESTANTS, FIGHT OVER AN ORGANIZED CONTEST UNTIL ONE WINNER IS LEFT.
- BUILT IN 72 AD UNDER THE REIGN OF FLAVIAN EMPERORS.
- GRANDEST AMONG ALL ROMAN AMPHITHEATERS.
- PARTS OR LEVELS:
 1. IMMA CAVEA
 2. MAENIANUM PRIMUM
 3. MAENIANUM SECUNDUM
 4. MAENIANUM TERTIUM
 5. MAENIANUM QUARTUM

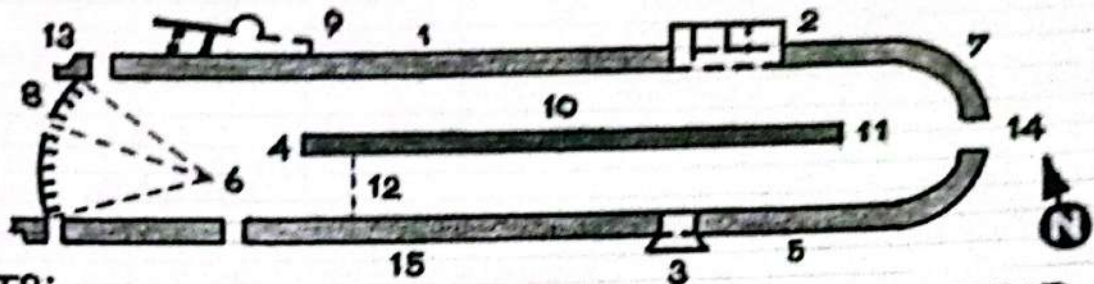


4. MAENIANUM SECUNDUM SUMMUM
5. MAENIANUM SECUNDUM IN LIGNEIS

FIGURE 74: (ON PAGE 66)
SECTION PLAN OF THE
COLOSSEUM.

STATUS: PRESERVED RUINS, UNDER ITALY'S MINISTRY HERITAGE SITE.

CIRCUS MAXIMUS ROME, ITALY



● **PARTS:**

- | | |
|-----------------|-----------------------|
| 1. TRIBUNES | 8. CARCERES |
| 2. PULVINAR | 9. TORENS |
| 3. IMPERIAL BOX | 10. SPATIUM |
| 4. SPINA | 11. META MURCIAE |
| 5. META | 12. ALBA LINEA |
| 6. OVA | 13. PORTA POMPAE |
| 7. DALPHINAE | 14. PORTA TRIUMPHALIS |
| | 15. TABERNAE |

FIGURE 75: FLOOR
PLAN OF THE CIRCUS
OF MAXIMUS.

● **ROMAN CIRCI ARE**
STRUCTURES USED BY
ROMANS TO ORGANIZE
A CHARIOT RACING.

● **THE FEATURED STRUCTURE ABOVE IS A 6TH CENTURY BCE CIRCUS,**
INTEGRATED UNDER ROMAN REPUBLIC.

STATUS: MINOR DAMAGES SUSTAINED, RESTORED IN THE MID-20TH
CENTURY AD AND OPENED AS A PUBLIC PARK.

TRIUMPHAL ARCH OF CONSTANTINE ROME, ITALY

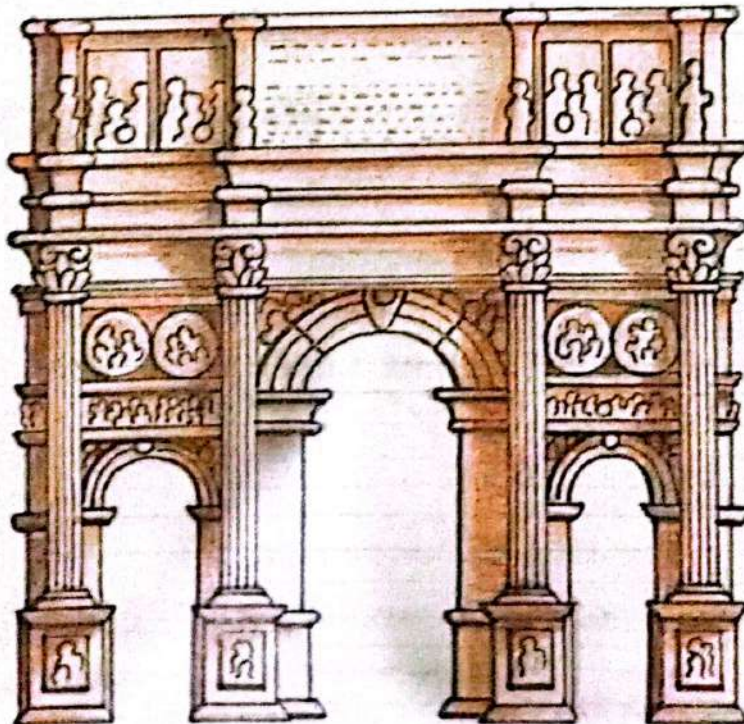


FIGURE 76: TRIUMPHAL ARCH OF CONSTAN-
TINE.

● **TRIUMPHAL ARCHES AND**
OBELISKS ARE ROMAN
MONUMENTAL STRUCTURES
ERECTED IN HONOR FOR
THE EMPEROR'S VICTO-
RIES SUCH AS GOLDEN E-
RAS AND BATTLES.

● **BUILT IN 312 AD, OPENED**
ON JULY 25, 315 AD IN HO-
NOR FOR EMPEROR CONS-
TANTINE'S VICTORIOUS
BATTLE AGAINST MAXEN-
TIUS IN THE MILVIAN BR-
IDGE (C. 310-312 AD)

● **THREE-ARCHED TYPE**

● **OTHER RELATED STRUC-**
TURE:

1. ARCH OF TITUS (81 AD)
SINGLE-ARCHED
2. ARCH OF TRAJAN
SINGLE-ARCHED

3. ARCH OF SEPTIMUS SEVERUS — THREE-ARCHED

STATUS: PRESERVED AT BEST CONDITION.

PONT du GARD AQUEDUCT LES BAUX, FRANCE

- AQUEDUCTS ARE CIVIL STRUCTURES ERECTED TO GATHER WATER TO THE ROMAN CITIES.
- CHARACTERIZED AS BRIDGE-LIKE STRUCTURES SUPPORTED BY CIRCULAR ARCHES AND A LINING CALLED SPECUS WHICH DIRECTS THE WATER AND PREVENT FROM SPILLING.
- A 1ST CENTURY AD AQUEDUCT BUILT TO SUPPLY THE CITY OF NÎMES. STRETCHING 50 KM LONG, 275 M HIGH, DIVIDED INTO THREE LEVELS.

STATUS: PRESERVED UNESCO WORLD HERITAGE SITE. STILL IN FUNCTION.

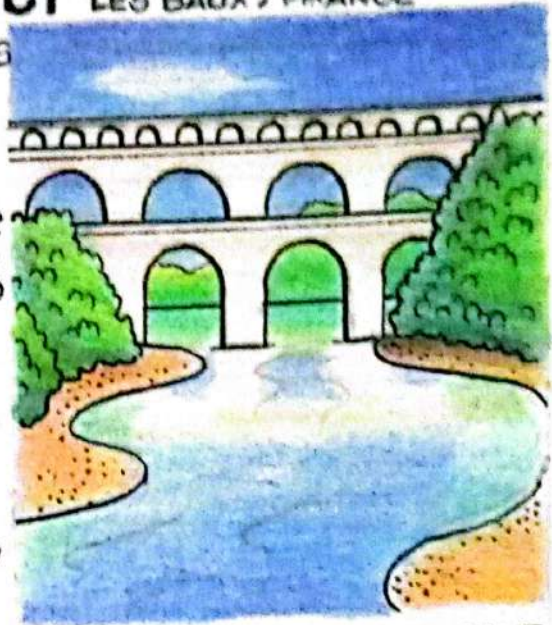


FIGURE 77 : PONT DU GARD AQUEDUCT, GARD RIVER, LES BAUX, FRANCE.

FOUNTAINS

- ARE WATER-AIDED ORNAMENTS COMMONLY SEEN IN PERISTYLE COURTS OF ROMAN STRUCTURES.
- TYPES OF FOUNTAINS:
 1. LOCUS — SIMILAR TO A LARGE BASIN OF WATER WHERE WATER IS STATUTORY.
 2. SALIENTES — PROVIDED WITH SPROUTED JETS.

DWELLINGS

1. DOMOS — A PRIVATE HOUSE.

PARTS:

- A. PROTHYRIUM — ENTRANCE PASSAGE
- B. ATRIUM — ENTRANCE COURT WITH AN IMPLUVIUM OR WATER CISTERN
- C. TABLINUM — OPEN SALOON OR PASSAGE AT THE SIDE
- D. PERISTYLE — INNER COLONNADED COURT
- E. CUBICULA — BEDROOM
- F. OECUS — RECEPTION ROOM
- G. TRICLINIA — DINING ROOM
- H. KITCHEN AND PANTRY

2. INSULA — BLOCK OF TENEMENT DWELLING.

3. VILLA — COUNTRY HOUSE.

RELATED STRUCTURE: VILLA OF HADRIAN, ROME

6

EARLY CHRISTIAN ARCHITECTURE

THE TERM "EARLY CHRISTIAN" REFERS TO THE GROUP OF PEOPLE WHO FOUND AND INTRODUCED CHRISTIANITY AS A NEW DOCTRINE ACROSS EUROPE. TAKING PLACE IN THE FORMER ROMAN EMPIRE: THE HOLY ROMAN EMPIRE IN THE MIDDLE AGES.

THE STRUCTURES BEING ERECTED DURING THIS PERIOD ARE MOSTLY RELIGION-CENTERED; WHICH MARKS THE EXTENSIVE EVOLUTION OF CHURCHES, BASILICAS, AND MONASTERIES.

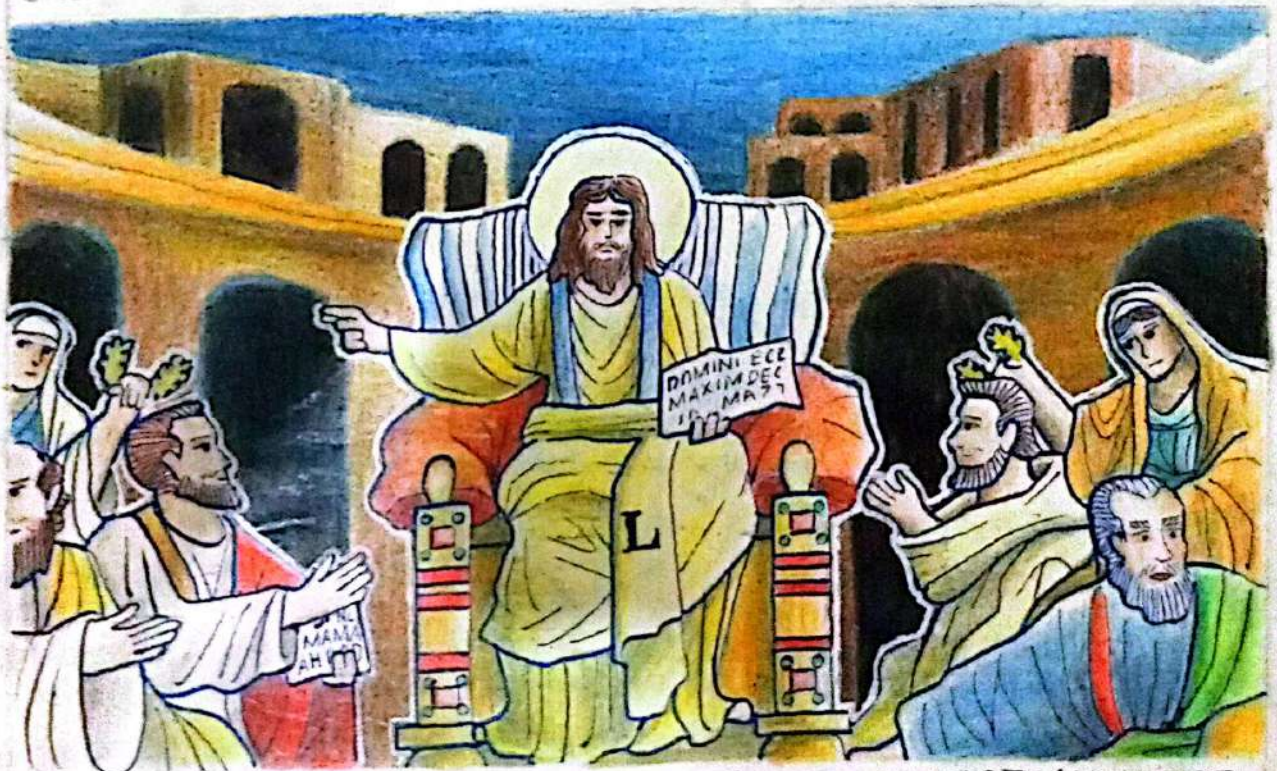


FIGURE 78: CHRIST PROCLAIMING THE WORD, AN APSE MOSAIC OF SANTA PUDENZIANA, ROME, FROM 4TH CENTURY AD.

GEOGRAPHY

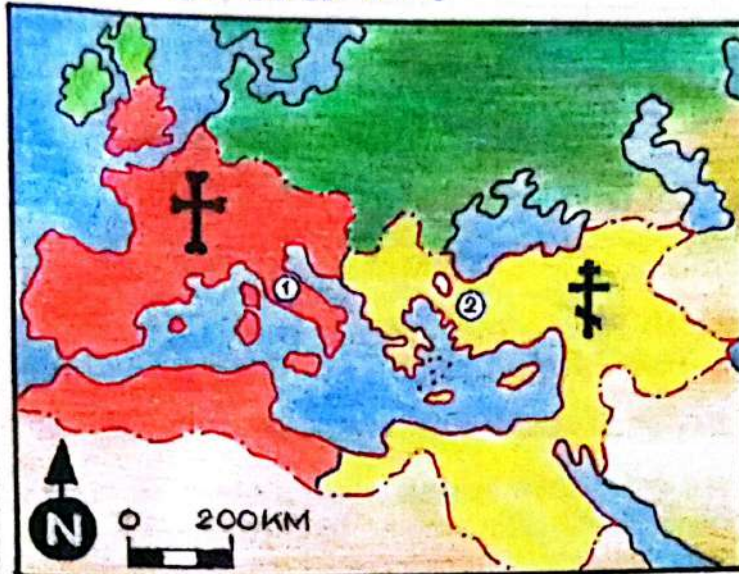


FIGURE 79: REFERENCE MAP OF THE HOLY ROMAN EMPIRE IN 6TH CENTURY AD.

LEGEND:

- WESTERN HRE
- EASTERN HRE
- HRE TERRITORIAL BORDER
- ① ROME, ITALY
- ② CONSTANTINOPLE, BYZANTIUM

- THE TRANSITION OF THE ROMAN EMPIRE INTO A CHRISTIAN-BASED RELIGIOUS KINGDOM: THE HOLY ROMAN EMPIRE, AFTER ITS FALL IN 476 AD.

- TWO REGIONS SEPARATED BY BELIEFS IN CHRISTIANITY:

1. WESTERN HOLY ROMAN EMPIRE: ROME, GAUL, ENGLAND, IBERIA, CARTHAGE, AND CELTS.

2. EASTERN ORTHODOX GREECE, MACEDONIA, ASIA MINOR, SYRIA, AND EGYPT.

- CAPITAL CITIES: ROME IN THE WEST. CONSTANTINOPLE IN THE EAST.

- THE EASTERN ORTHODOX DEVELOPED IN RAVENNA. BYZANTIUM. SUB-DUED BY JUSTINIAN I IN 537 AD.

THIS LINKS THE RELATION BETWEEN THE EARLY CHRISTIAN AND BYZANTINE STYLE.

GEOLOGY

- THE OLD QUARRIES IN ROME AND THE RUINED BUILDINGS INFLUENCED THE ARCHITECTURAL TREATMENT AND STYLE IN EARLY CHRISTIAN STRUCTURES.

- SAME STYLES APPLIED IN TERMS OF CONSTRUCTION SYSTEM, USE OF ORDERS, MATERIALS, AND ORNAMENTS WITH THE CLASSICAL ROMAN ARCHITECTURE.

CLIMATE

- NORTHERN ITALY: SLIGHTLY COLDER CAUSED BY THE COLD WINDS COMING FROM THE PEAKS OF ALPS MOUNTAINS.
- CENTRAL ITALY: MODERATE TEMPERATURE AND SLIGHTLY TROPICAL CLIMATE.
- SOUTHERN ITALY: ALMOST TROPICAL, SLIGHTLY WARMER.

RELIGION

- UPON THE CONVERSION OF **EMPEROR CONSTANTINE I** FROM ROMAN MYTHOLOGY TO CHRISTIANITY IN 312 AD, IT RAPIDLY SPREAD THROUGHOUT THE EMPIRE THAT IT DIFFUSED INTO THE CIVILIZED WORLD IN JUST A COUPLE OF YEARS.
- GEOGRAPHY INFLUENCED THE RISE OF **EASTERN ORTHODOX** ON THE EASTERN TERRITORIES. RELIGIOUS PRACTICES CHARACTERIZED THEIR BELIEFS.
 1. WOMEN IN EASTERN ORTHODOX CAN BE PRIESTS. WHEREAS ONLY MEN CAN BE PRIEST IN THE WEST.
 2. BURIAL WAKE LASTS LONGER IN THE WEST THAN IN THE EAST.
- EARLY CHRISTIANS WERE INSPIRED FROM THE **MORAL TEACHINGS** OF JESUS CHRIST; HIS LIFE, DEATH, AND RESURRECTION DURING THE START OF THE TRANSITION OF ANCIENT ROME INTO AN EMPIRE.

HISTORY

- THE EARLY CHRISTIAN IS BASICALLY THE EXTENSION OF THE REIGN OF THE CHRISTIAN ROMANS IN THE MIDDLE AGES.

312
AD

- INTRODUCTION OF CHRISTIANITY IN THE ROMAN EMPIRE BY **EMPEROR CONSTANTINE I**, RAVENNA, ITALY.

337
AD

- CONSTANTINE'S DEATH IN 337 AD ENDED THE OLD ROMAN GOVERNMENT SYSTEM, MONARCHY, LEADING TO THE SEPARATION OF THE EAST AND WESTERN ROMAN EMPIRE.

364
AD

- THE POLITICAL DIVISION OF THE EMPIRE FIRST TOOK PLACE IN 364 AD UNDER THE EMPERORS **VALENTIAN** (WEST) AND HIS BROTHER **VALENS** IN THE EAST.

379
AD

- **EMPEROR THEODOSIUS** (379 - 395 AD) ONCE REUNITED THE WEST AND EASTERN ROMAN EMPIRE, BUT EVENTUALLY DIVIDED AFTER HIS DEATH IN 395 AD.

476
AD

- THE SERIES OF EMPERORS IN THE WESTERN ROMAN EMPIRE CAME TO AN END DUE TO ITS EVENTUAL FALL IN 476 AD.

- POST EMPIRE FALL, **EMPEROR ZENO** (474 - 491 AD) STILL MANAGED TO REUNITE SOME OF THE REMAINING WESTERN ROMAN STATES WHILE TEMPORARILY DECLARING **CONSTANTINOPLE** AS THE CAPITAL.

591
AD

- **LATIN EARLY CHRISTIAN** EVOLVED: THE LATEST PHASE OF ROMAN ART UNTIL THE RENAISSANCE, INTRODUCED DURING THE REIGN OF **GREGORY THE GREAT** IN 591 AD, TOGETHER WITH THE PRESERVANCE OF OLD ROMAN ARCHITECTURE.

CHARACTER

ΣΙΜΠΛΙCΙΤΑΣ IN CONΣΙΛΙΟ ET CΥΡΙΑΤΙΟΝΕ,
ΓΡΟCΣCΙΤΑΣ IN ΕΞΕCΥΤΙΟΝΕ.

- IMPRESSIVE AND DIGNIFIED; DUE TO THE INCREASE IN THE APPARENT SIZE OF THE BASILICAS BY THE LONG PERSPECTIVE OF THE COLUMNS, AND THE COMPARATIVE LOWNESS OF THE INTERIORS IN PROPORTION TO THEIR LENGTH.

PRINCIPAL MATERIAL: OBTAINED FROM THE OLD ROMAN QUARRIES AND BUILDINGS.

PRINCIPAL STRUCTURE: BASILICA CHURCH

STRUCTURAL SYSTEM: CHARACTERIZED BY THE COMBINATION OF COLUMNAR AND TRABEATED AND ARCUATED.

SOME EARLY CHRISTIAN ORNAMENTS:

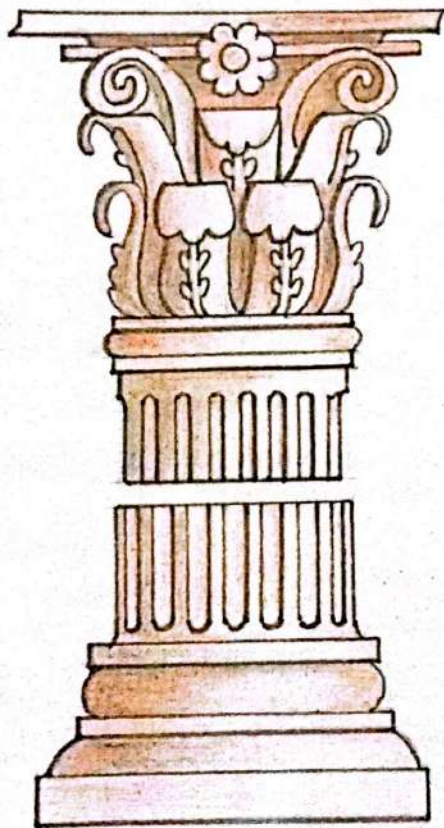


FIGURE 80: CORINTHIAN COLUMN

FIGURE 82: (RIGHT) FLOOR MOSAIC PAVING IN THE CHURCH OF SAN LORENZO FUORI LE MURA, ROME, ITALY, CIRCA 6TH CENTURY AD.

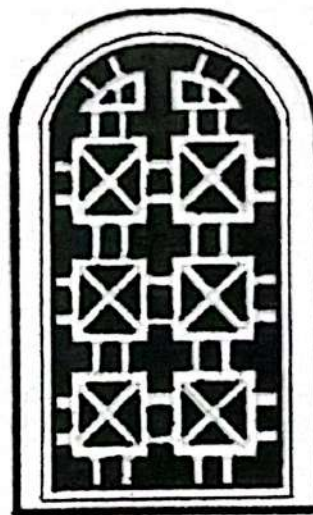


FIGURE 81.1:
WINDOW OF GRADO CATHEDRAL (571-586 AD)

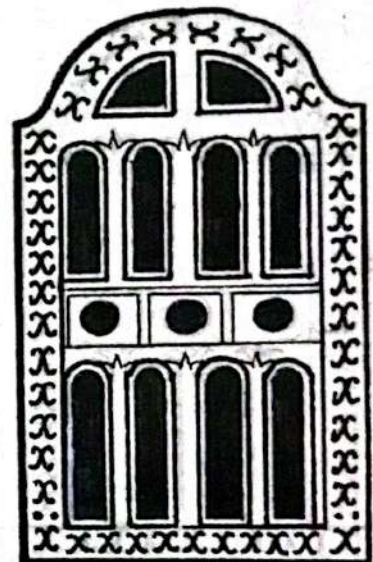


FIGURE 81.2:
WINDOW OF VENICE (8TH CENTURY AD)



THE STRUCTURES:

BASILICA OF ST. CLEMENT ROME, ITALY

- PLANNED AND DESIGNED BY ARCHITECT: CARLO STEFANO FONTANA / AS DEDICATION TO POPE CLEMENT I (34—100 AD)
 - BUILT IN 1108 AD, COMPLETED IN 1123 AD, A 25 x 45 METER BASILICA FEATURING PALEOCHRISTIAN AND ROMANESQUE ARCHITECTURAL STYLE
- STATUS: FIRE ACCIDENTS THROUGHOUT TIME WAS RESTORED IN ORDER OF THE POPE PROTECTORS THAT SUCCEEDED MADE IT PRESERVED IN THE PRESENT.

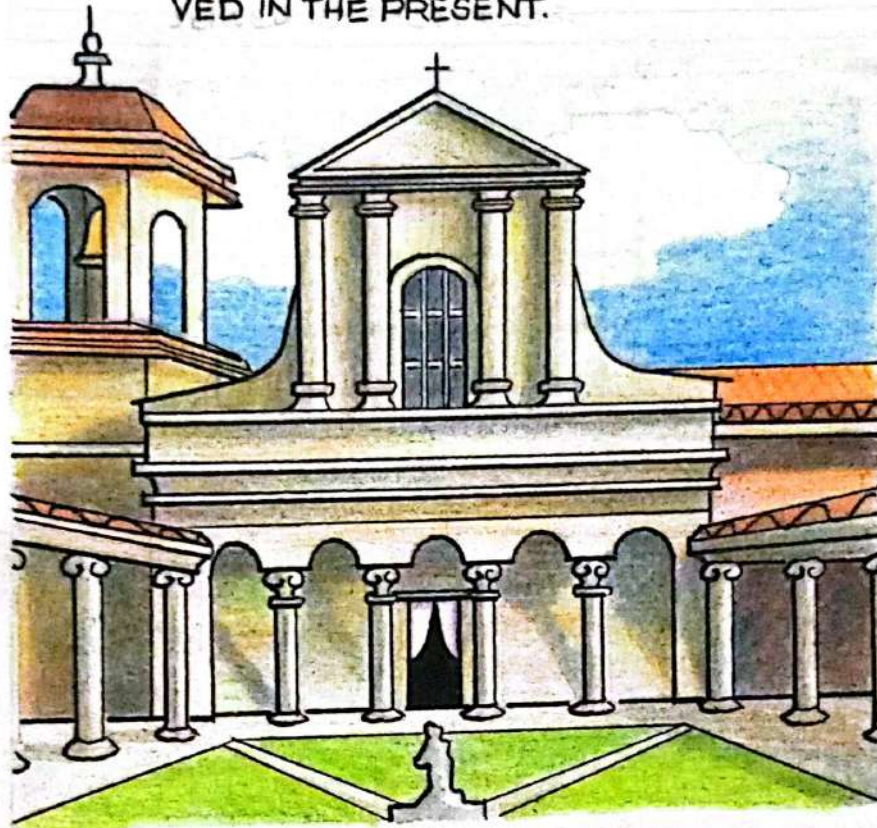


FIGURE 83.1: FACADE PERSPECTIVE ON THE ST. CLEMENT BASILICA.

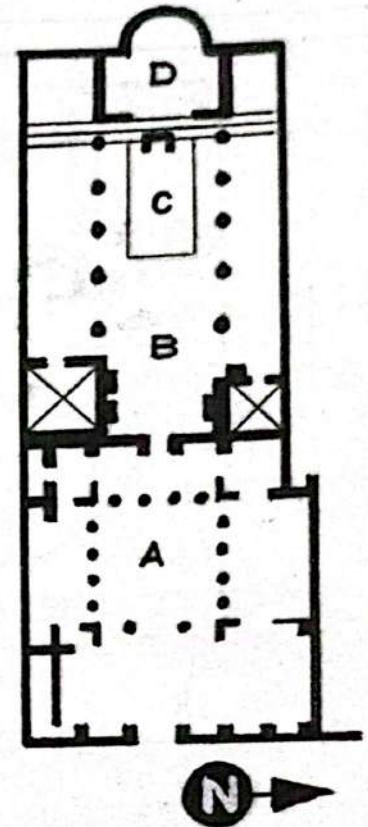


FIGURE 83.2: FLOOR PLAN OF ST. CLEMENT BASILICA.

PARTS:

A. FORECOURT
B. NAVE

C. SCHOLA CANTORIUM
D. SANCTUARY.

FIGURE 83.3: SECTION PLAN OF ST. CLEMENT BASILICA.

**ST. PETER BASILICA** HOLY SEE

- ERECTED AND DESIGNED BY EMPEROR CONSTANTINE I IN 330 AD

NEAR THE SITE OF MARTYRDOM OF SAINT PETER IN THE CIRCUS OF NERO.

- IT HAS A TRANSEPT OR BEMA 55 FT WIDE AND 113 FT. HIGH. THE BEST EXAMPLE OF EARLY CHRISTIAN ARCHITECTURE BEING INTEGRATED LATER DURING ROMANESQUE AND RENAISSANCE PERIOD.

STATUS: HAVE BEEN INTEGRATED IN DIVERSE MANNER BY NUMEROUS ARCHITECTS IN THE RENAISSANCE PERIOD, MAKING IT ONE OF THE PAPAL BASILICAS OF ROME AND MOST PROMINENT STRUCTURE IN HOLY SEE.

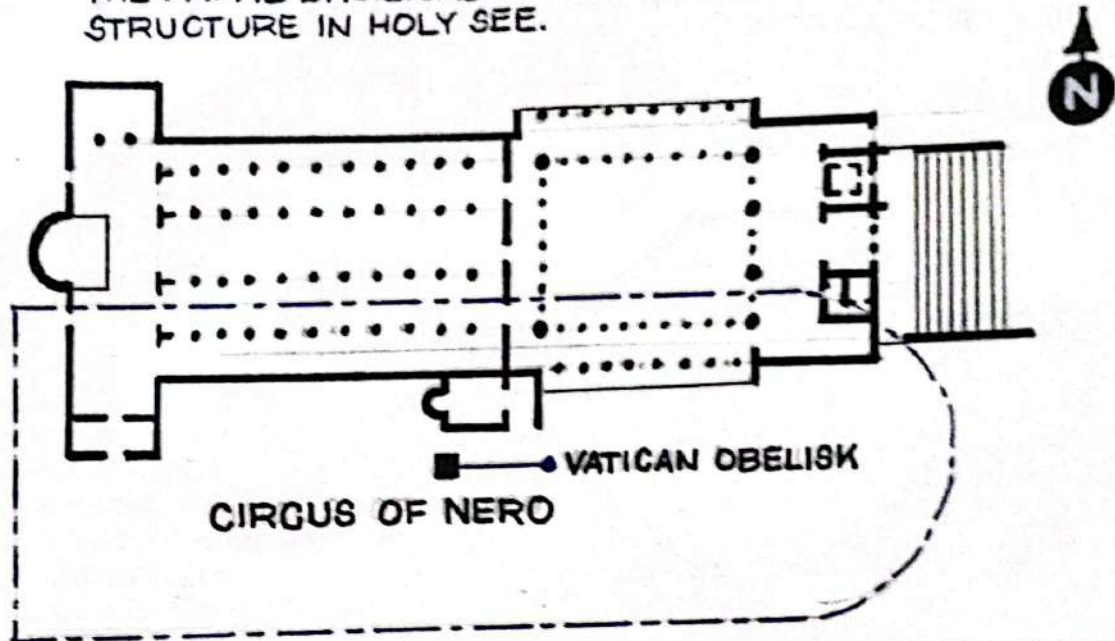


FIGURE 84: CONJECTURED PLAN OF THE OLD ST. PETER BASILICA IN 1450 AD. WITH RESPECT TO THE PROPERTY LINE OF THE CIRCUS OF NERO. ART BY UNKNOWN.

BAPTISTERY OF CONSTANTINE ROME, ITALY

- BAPTISTERIES ARE EARLY CHRISTIAN STRUCTURES USED SOLELY FOR THE SACRAMENT OF BAPTISM.
- THE FORM WAS DERIVED FROM THE ROMAN CIRCULAR TEMPLES AND TOMBS.
- IN ADAPTING THE ROMAN TOMBS AS MODELS FOR THESE BUILDINGS, THE EARLY CHRISTIANS MODIFIED THEM TO SOME EXTENT. FOR THE INTERNAL COLUMNS, WHICH IN THE EXAMPLES OF ROMAN STRUCTURE WERE GENERALLY USED IN A DECORATIVE WAY, NOW USED TO SUPPORT THE WALLS CARRYING THE DOMES.
- THE BAPTISTERY OF CONSTANTINE IS AN OCTAGONAL BAPTISTERY WITH THE ROOF IS SUPPORTED BY A SCREEN OF EIGHT COLUMNS WHICH ARE TWO STORIES IN HEIGHT.
- FOUND BY POPE SIXTUS III IN 440 AD, PERHAPS ON AN EARLIER STRUCTURE. FOR A LEGEND GREW UP THAT EMPEROR CONSTANTINE HAD BEEN BAPTIZED THERE IN 324 AD AND LATER ENRICHED THE STRUCTURE.

STATUS: A PLACE TO WORSHIP AND ORGANIZE BAPTISMAL CEREMONIES. CURRENTLY A PROPERTY OF THE VATICAN DIOCESE UNDER THE INAUGURATION OF ST. JOHN LATERAN

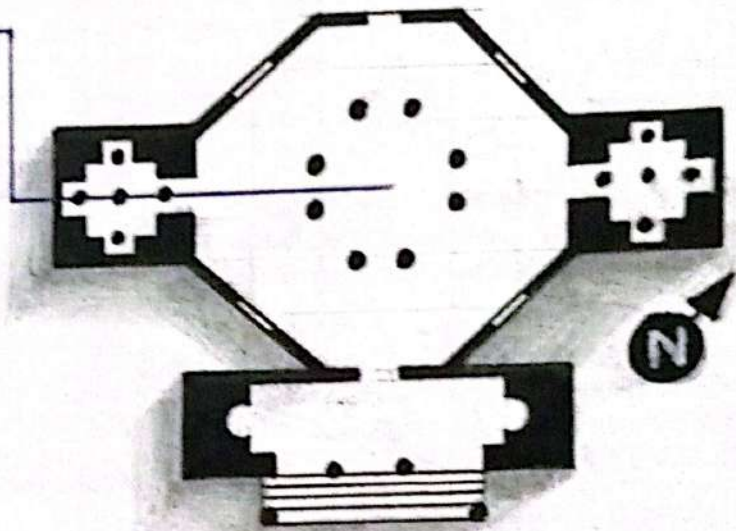


FIGURE 85.1: FRONT ELEVATION OF THE BAPTISTERY OF CONSTANTINE. ALSO KNOWN AS ST. JOHN LATERAN BAPTISTERY, ROME.

FIGURE 85.2: FLOOR PLAN OF THE BAPTISTERY OF CONSTANTINE SHOWING THE EIGHT INTERIOR COLUMNS.

THE 8 INTERIOR COLUMNS SYMBOLIZES THE 8 HOLY DAYS OF THE PASION OF CHRIST:

1. PALM SUNDAY
2. HOLY MONDAY
3. HOLY TUESDAY
4. HOLY WEDNESDAY
5. MAUNDY THURSDAY
6. GOOD FRIDAY
7. BLACK SATURDAY
8. EASTER SUNDAY



BAPTISTERY OF NOCERA NOCERA, ITALY

- BUILT AROUND 350 AD IN THE PROVINCE OF NOCERA SUPERIORE.
- A CIRCULAR BAPTISTERY 24.4 M IN DIAMETER WITH TWO RINGS OF ECCENTRIC COLUMNS.
- DOMED AND COVERED WITH A WOODEN ROOF, AND APPEARS TO BE THE FIRST INSTANCE OF THE USE OF BOTH, AS THE ROMAN ARCHITECTS ALWAYS ALLOWED THE STONE VAULT TO SHOW EXTERNALLY AS IN THE PANTHEON.

STATUS: PRESERVED STRUCTURE AS PART OF THE NOCERA SUPERIORE.

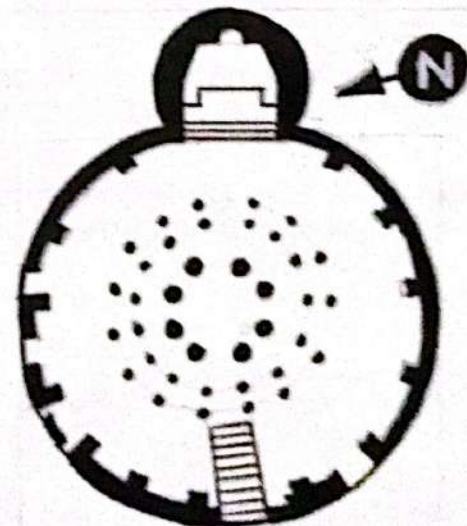


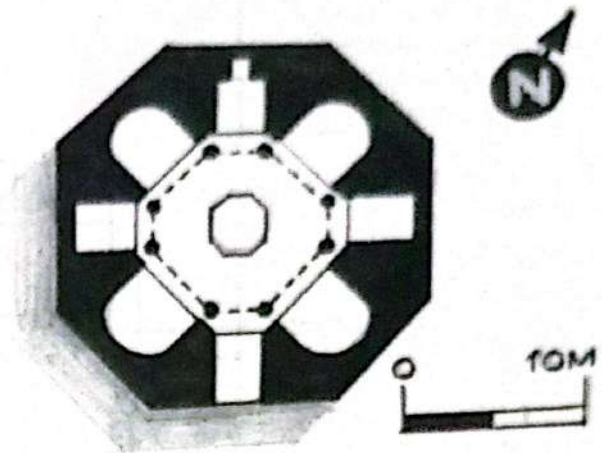
FIGURE 86: FLOOR PLAN OF THE BAPTISTERY OF NOCERA.

BAPTISTERY OF MILAN MILAN, ITALY

- ALSO KNOWN AS THE BAPTISTERY OF SAN GIOVANNI ALLE FONTI, A 4TH CENTURY AD. OCTAGONAL BAPTISTERY LOCATED BETWEEN THE DUOMO AND MUSEO DEL NOVECENTO, PART OF THE MILAN CATHEDRAL.

STATUS: A PRESERVED RUINS.
THE ORIGINAL REMAINS ARE LOCATED ABOVE WHERE THE MILAN CATHEDRAL LIES.

FIGURE 87: SUGGESTED FLOOR PLAN OF THE MILAN BAPTISTERY.



BAPTISTERY OF RAVENNA

RAVENNA, ITALY

- ERECTED BY THE OSTROGOTH KING THEODORIC THE GREAT BETWEEN THE END OF 5TH CENTURY AD AND BEGINNING OF 6TH CENTURY AD.



- ALSO KNOWN AS THE ARIAN BAPTISTERY, AN EASTERN ORTHODOX BAPTISTERY

- OCTAGONAL STRUCTURE WITH TWO ARCADES IN THE INTERIOR, ONE ABOVE THE CENTER.

- THE DOME, CONSTRUCTED OF HOLLOW TILES, HAS FINE MOSAICS REPRESENTING THE BAPTISM OF CHRIST, AND ALTARS WITH THE OPEN BOOKS OF THE APOSTLES.

FIGURE 88.1

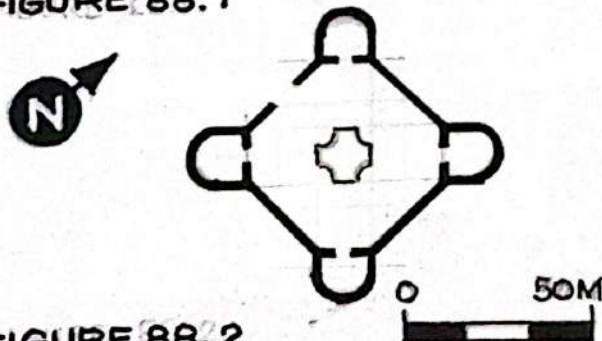


FIGURE 88.2

STATUS: MAJOR RECONSTRUCTION IN 1543 AD. A PRESERVED STRUCTURE, AND A UNESCO WORLD HERITAGE SITE.

FIGURE 88.1: PERSPECTIVE DRAWING OF THE ARIAN BAPTISTERY.

FIGURE 88.2: FLOOR PLAN OF THE ARIAN BAPTISTERY.

TOMB OF ST. CONSTANZA

ROME, ITALY

- ERECTED BY EMPEROR CONSTANTINE AS A TOMB FOR HIS DAUGHTER CONSTANTINA (320–354 AD)
- CONSISTS HER SARCOPHAGUS THAT WAS SCULPTED IN 340 AD.
- IT WAS CONVERTED INTO A CHURCH IN 1256 AD.
- THE 35- FEET DIAMETER DOME WAS SUPPORTED BY 12 PAIRS OF COUPLE GRANITE COLUMNS.



STATUS: PRESENTLY KNOWN AS THE CHURCH OF ST. CONSTANZA SINCE 1256 AD.

FIGURE 89: (ON PAGE 76) PERSPECTIVE DRAWING OF THE FAÇADE OF THE TOMB IN ST. CONSTANZA. (330 AD)

TOMB OF GALLA PLACIDA RAVENNA, ITALY

- EXCEPTIONALLY CHARACTERIZED BY ITS CRUCIFORM PLAN.
- INTERNALLY 35 x 80 FEET IN AREA.
- HAS RAISED LANTERN AT THE CROSSING PIERCED WITH FOUR WINDOWS.
- DOME BY A PORTION OF SPHERE, AND IS ONE OF THE FEW PORTIONS OF ONE HEMISPHERE.
- BUILT AROUND 425 AD DEDICATED AS THE RESTING PLACE OF EMPRESS GALLA PLACIDIA.

STATUS: LISTED AS HERITAGE SITE OF ITALY.

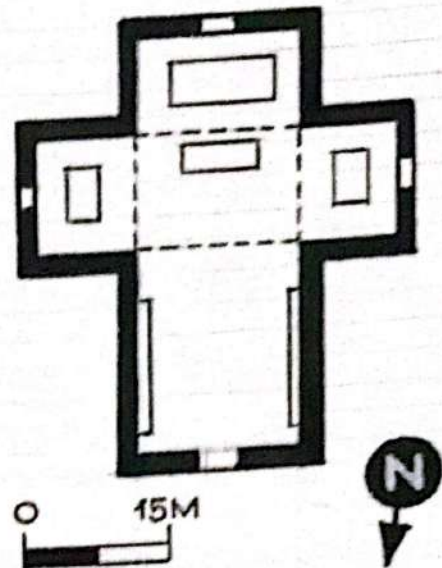


FIGURE 90: FLOOR PLAN OF THE MAUSOLEUM OF GALLA PLACIDIA

TOMB OF THEODORIC RAVENNA, ITALY

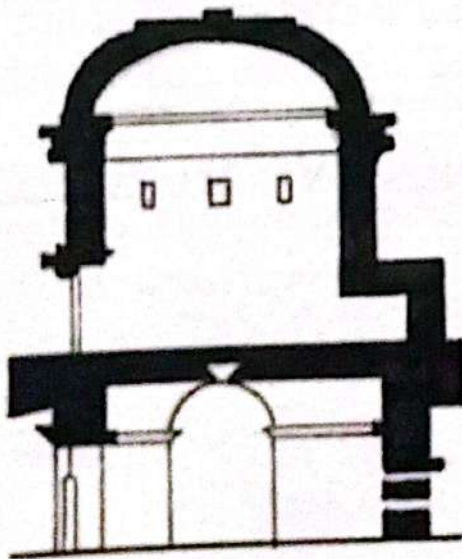


FIGURE 91.1: SECTION PLAN OF THE MAUSOLEUM OF THEODORIC

- BUILT IN 520 AD AS THE RESTING PLACE OF EMPEROR THEODORIC THE GREAT (474 - 526 AD)
- TWO STORIES IN HEIGHT, THE LOWER STOREY BEING A DECAGON 45 FEET IN DIAMETER EXTERNALLY, AND CONTAINING A CRUCIFORM CRYPT.
- TRACES REMAIN OF AN EXTERNAL ARCADE AROUND THE UPPER PORTIONS, STANDING ON THE DECAGONAL BASEMENT.
- THE ROOF CONSIST OF ONE SLAB OF STONE, HOLLOWED OUT IN THE FORM OF A FLAT DOME, 35 FT IN DIAMETER, AND AROUND THE EDGE OF THIS BLOCK ARE STONE HANDLES, ORIGINALLY USED TO PLACE THIS IMMENSE COVERING IN POSITION.

STATUS: UNESCO WORLD HERITAGE SITE.

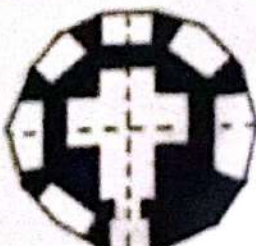


FIGURE 91.2



FIGURE 91.3

FIGURE 91.2-3: FLOOR PLAN OF THE LOWER (91.2) AND UPPER (91.3) FLOOR OF THE MAUSOLEUM OF THEODORIC.

CHURCH OF THE HOLY SEPULCHRE

JERUSALEM, ISRAEL

- A 4TH CENTURY AD CHURCH DEDICATED AS THE HOLY PLACE WHERE JESUS CHRIST WAS CRUCIFIED AND BURIED.

- PRESERVED SIGNIFICANT BIBLICAL SCENES CAN BE FOUND INSIDE UNDER STRICT PROTECTION OF THE PARISH

- GROUNDBREAKING IN 326 AD, COMPLETED IN 335 AD.

- ARCHITECTURAL STYLE INFLUENCES:

1. EARLY CHRISTIAN
2. ROMANESQUE
3. BAROQUE



FIGURE 92: AERIAL PERSPECTIVE OF THE CHURCH OF THE HOLY SEPULCHRE.

- REMAINED A CHRISTIAN CHURCH EVEN WHEN JERUSALEM WAS UNDER ISLAMIC CONTROL IN 637 AD.

- DEMOLISHED BY THE ORDER OF CALIPH AL-HAKIM IN 1008 AD, BUT WAS RECONSTRUCTED BY HIS SON, ALI-AZ ZAHIR IN 1028-1048 AD.

- RE-DESIGNED WITH MODERN STYLES IN 1810 AD BY ARCHITECT NIKOLAOS CH. KOMNENOS.

STATUS: CURRENTLY LISTED AS HERITAGE SITE OF ISRAEL AND ONE OF THE MOST SIGNIFICANT RELICS OF CHRISTIANITY.

COMPARATIVE ANALYSIS

WITH BYZANTINE ARCHITECTURE (SEE PAGE 82)

1. PLAN—THE EARLY CHRISTIANS ADAPTED THE BASILICAN MODEL FOR THEIR CHURCH. BUT IN ADDITION, THE HALLS, BATHS, DWELLING-HOUSES, AND EVEN PAGAN TEMPLES WERE USED FOR PLACES OF WORSHIP.
2. WALLS—CONSTRUCTED ACCORDING TO THE ROMAN METHODS. RUBBLES OR CONCRETE WALLING BEING USED, FACED WITH PLASTER, BRICK, OR STONE.
—MOSAIC WAS USED INTERNALLY, AND SOMETIMES EXTERNALLY ON THE WEST FAÇADES FOR DECORATIVE PURPOSES.
3. OPENINGS—DOORS, WINDOWS, AND NICHES WERE GENERALLY SPANNED BY A SEMICIRCULAR ARCH, THE USE OF LINTEL BEING DISPENSED WITH.
4. ROOFS—WOODEN ROOFS, COVERED THE CENTRAL NAVE, SIMPLE FORMS OF CONSTRUCTION SUCH AS KING AND QUEEN POST TRUSSES BEING EMPLOYED.
5. COLUMNS—OFTEN OF DIFFERENT DESIGN AND SIZE, BEING MOSTLY

FROM EARLIER ROMAN BUILDINGS WHICH HAD FALLEN INTO RUINS OR WERE PURPOGELY DESTROYED.

- IT WAS NATURAL THAT THE EARLY CHRISTIANS BUILDERS, NOT BEING GOOD CRAFTSMEN THEMSELVES, SHOULD USE IN THEIR BUILDINGS THE MATERIALS AND ORNAMENTS WHICH HAD BEEN LEFT BY THE ROMAN PAGANS.

6. MOULDINGS — COARSE VARIATIONS OF ROMAN TYPES AND THE CARVING IS ONE OF THE RUDEST KIND THOUGH RICH IN GENERAL EFFECT.

- ACANTHUS ORNAMENTATIONS BECAME MORE CONVENTIONAL IN FORM.

7. ORNAMENTS — INTRODUCTION OF MUCH COLOR IS A FEATURE OF THE PERIOD, GIVING MUCH RICHNESS TO THE INTERIORS.

- THE DESIGN IS BOLD AND SIMPLE, BOTH IN FORM AND DRAPERIES, AND AN EARNEST AND SOLEMN EXPRESSION, FITTING WELL THE POSITION THEY OCCUPY, CHARACTERIZES THE GROUPS.

7

BYZANTINE ARCHITECTURE

YET ANOTHER MIDDLE AGE CIVILIZATION FLOURISHED IN THE EUROPEAN WORLD, BRIDGING THE INFLUENCES IN ARCHITECTURE; THE BYZANTINE EMPIRE. IN THE EAST OF ITS PREDECESSORS, ROME.

ART AND ARCHITECTURE INFLUENCED BY COMBINATIONS OF ROMAN, THE EASTERN ORTHODOX OF MEDIEVAL GREECE, AND SOME IN ASIA MINOR AND OTHER WEST ASIATIC STATES.



FIGURE 93: EXTERIOR PERSPECTIVE OF HAGIA SOPHIA IN CONSTANTINOPLE, BYZANTIUM, (NOW ISTANBUL, TURKEY) ERECTED IN 532 — 537 AD BY THE BYZANTINE EMPEROR JUSTINIAN.

GEOGRAPHY

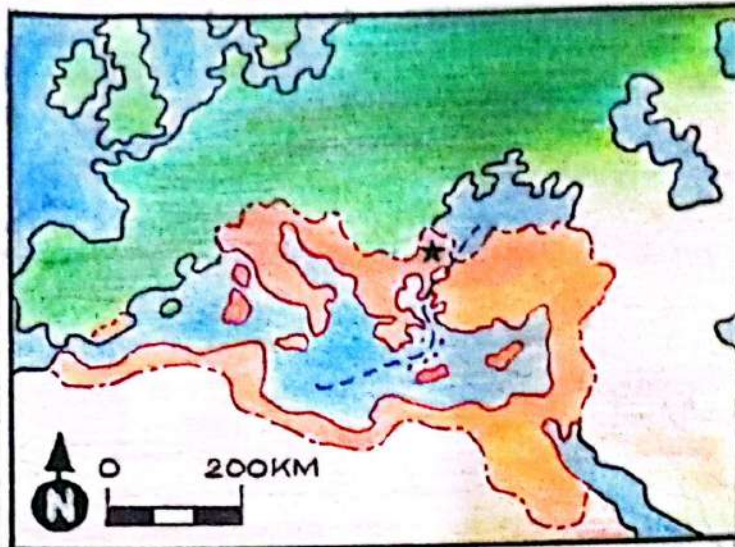


FIGURE 94: REFERENCE MAP OF BYZANTINE EMPIRE AT ITS PEAK IN 565 AD UNDER THE RULE OF JUSTINIAN I.

LEGEND:

- IMPERIAL BORDER OF BYZANTIUM (565 AD)
- ★ CONSTANTINOPLE
- WAY OF THE "GOLDEN HOUR" INLET

- SUCCESSORS OF THE EASTERN ROMAN EMPIRE CENTERED AT THE CITY OF CONSTANTINOPLE, BYZANTIUM.

- "NEW ROME" ACCORDING TO THE TURKS OF ASIA.

- STOOD BETWEEN TWO GREAT HIGHWAYS:

1. WATER HIGH ROAD: BLACK SEA TO MEDITERRANEAN SEA.

2. LAND HIGH ROAD: EUROPE TO ASIA.

- THE ABSENCE OF TIDES AND THE DEPTH OF THE HARBOR OF MARMARA SEA, NEAR BYZANTIUM, AN INLET, KNOWN AS "GOLDEN HOUR" FOUR MILES IN LENGTH, RENDERED ITS QUAYS ACCESSIBLE TO VESSELS WITH LARGE BURDENS.

GEOLOGY

- CONSTANTINOPLE POSSESSED NO GOOD BUILDING BRICKS BUT AS FAR AS POSSIBLE, THE MATERIALS UPON THE SPOT HAD TO BE EMPLOYED.
- MARBLE WAS OBTAINED FROM DIFFERENT QUARRY SITES IN EASTERN MEDITERRANEAN STATES TO CONSTANTINOPLE WHERE MATERIALS ARE MANUFACTURED.

CLIMATE

- THE TURKISH AND BALKAN PENINSULAS, WHERE CONSTANTINOPLE LIES IN BETWEEN HAS HOTTER CLIMATE THAN IN ROME IN THE ITALIAN PENINSULA.

RELIGION

- CONSTANTINE THE GREAT, POPULARIZED CHRISTIANITY IN 312 AD AS A STATE RELIGION IN BYZANTIUM.
- THE EAST AND WESTERN HIRE DIVISION SINCE 364 AD INFLUENCED THE EVOLUTION OF EASTERN ORTHODOX IN RAVENNA, ITALY AND LATER SPREAD TO THE EASTERN STATES, SUCH AS BYZANTIUM IN 537 AD UNDER THE RULE OF JUSTINIAN I.

HISTORY

330
AD

- A GREEK COLONY OF ROME UNDER THE RULE OF EMPEROR CONSTANTINE I.
- BYZANTIUM MAY HAVE BEEN FLOURISHED ON MAY 11, 330 AD.

364
AD

- POLITICAL DIVISION OF WEST AND EASTERN HOLY ROMAN EMPIRE.
- DEVELOPMENT OF EASTERN ORTHODOX IN RAVENNA.

565
AD

- THE EMPIRE REACHED ITS MAXIMUM EXTENT UNDER THE RULE OF EMPEROR JUSTINIAN I.

637
AD

- JERUSALEM WAS CONQUERED BY THE RASHIDUN CALIPHATE. THIS INTRIGUED BOTH EAST AND WEST HERE DECLARING CRUSADES LATER IN THE 11TH CENTURY AD.

1096
AD

- THROUGH POPE URBAN II, THE FIRST CRUSADE WAS ANNOUNCED.
- A HOLY CONQUEST OF THE HERE AIMING TO RETRIEVE THE HOLY LAND OF JERUSALEM FROM THE MUSLIM RASHIDUNS.
- ELEVEN MORE CRUSADES FOLLOWED FROM 1099 TO 1272 AD. ALL OF THEM WERE UNSUCCESSFUL.

1453
AD

- EMPEROR CONSTANTINE XI, UNDER THE LAST RULER OF THE EMPIRE, CONSTANTINOPLE FELL IN THE HANDS OF OTTOMAN ATTATURKS ON MAY 29, 1453 AD.

CHARACTER

ΣΙΜΠΛΙΚΙΤΑΣ ΖΙΝ ΚΟΝΣΙΛΙΟ ΕΞΤΕΡΝΟ, ΥΒΕΡΤΑΣ
ΙΝ ΚΥΡΑΤΙΟΝΕ ΙΝΤΕΡΝΑ

PRINCIPAL MATERIALS: BRICKS FOR WALLS AND DOMES

PRINCIPAL STRUCTURE: CHURCHES

STRUCTURAL SYSTEM

- FUSION OF DOMICAL CONSTRUCTION AND THE CLASSIC COLUMNAR STYLE.
- NO BELL TOWERS.

COMPARATIVE ANALYSIS

WITH EARLY CHRISTIAN ARCHITECTURE (SEE PAGE 78)

1. PLANS — BYZANTINE CHURCHES ARE ALL DISTINGUISHED BY A GREAT CENTRAL SQUARE COVERED WITH A DOME SUPPORTED BY PENDENTIVES.

2. WALLS — OFTEN CONSTRUCTED OF BRICK.

- INTERNALLY, ALL THE ORIENTAL LOVE OF MAGNIFICENCE WAS DEVELOPED.
- MARBLE CASING AND MOSAIC BEING APPLIED TO THE WALLS; HENCE, A FLAT TREATMENT AND ABSENCE OF MOULDINGS PREVAILED.
- EXTERNALLY, THE BUILDINGS WERE LEFT COMPARATIVELY PLAIN, ALTHOUGH THE FAÇADE WAS SOMETIMES RELIEVED BY ALTERNATIVE ROWS.

3. OPENINGS — DOORS AND WINDOWS ARE SEMICIRCULAR HEADED.

- SEGMENTAL AND HORSESHOE ARCHED OPENINGS
- WINDOWS ARE SMALL AND GROUPED TOGETHER.

4. ROOFS — SERIES OF DOMES FORMED IN BRICK, STONE, OR CONCRETE, WITH FREQUENTLY NO FURTHER EXTERNAL COVERING.

5. COLUMNS — TAKEN FROM ANCIENT STRUCTURES, WHICH NOT BEING SO NUMEROUS IN THE EAST.

- CAPITALS SOMETIMES TOOK A FORM DERIVED FROM THE ROMAN IONIC OR CORINTHIAN TYPES.
- COLUMNS ARE USED CONSTRUCTIVELY, BUT WERE ALWAYS SUBORDINATE FEATURES.

6. MOULDINGS — INTERNALLY, DECORATIVE LINING OF MARBLE AND MOSAIC PANELS WAS SOMETIMES FRAMED IN BILLET MOULDINGS.

- EXTERNALLY, THE SIMPLE TREATMENT OF THE ELEVATIONS.

7. ORNAMENTS — ELABORATE IN THE EXTREME.

- THE WALLS BEING LINED WITH COSTLY MARBLES WITH THE VEINING CAREFULLY ARRANGED SO AS TO FORM PATTERNS.

THE STRUCTURES:

CHURCH OF STS. SERGIUS & BACCHUS

CONSTANTINOPLE, BYZANTIUM

- ERECTED BY JUSTINIAN I IN 527 AD.
- A 92 x 109 FT CHURCH WITH AN INTERIOR ARRANGEMENT VERY SIMILAR TO ST. VITALE'S CHURCH, BUT IT HAS FOUR NICHE ONLY.
- ENCLOSED IN A SQUARE FORM INSTEAD OF AN OCTAGON.
- THE DOME IS 52 FT IN DIAMETER AND 66 FEET HIGH.

STATUS: MAY HAVE BEEN THE LAST STANDING LATE ANTIQUE BUILDING WITHIN THE MONASTERY COMPLEX OF CONSTANTINOPLE.

FIGURE 95.1-2: SOME ORNAMENTAL INSCRIPTIONS IN THE CHURCH

IOVCTINIANOC

95.1: JUSTINIAN'S NAME
INSCRIPTION ORNAMENT.

ΘΕΟΔΩΡΑC

95.2: THEODORA'S NAME (JUSTINIAN'S WIFE) INSCRIPTION ORNAMENT.

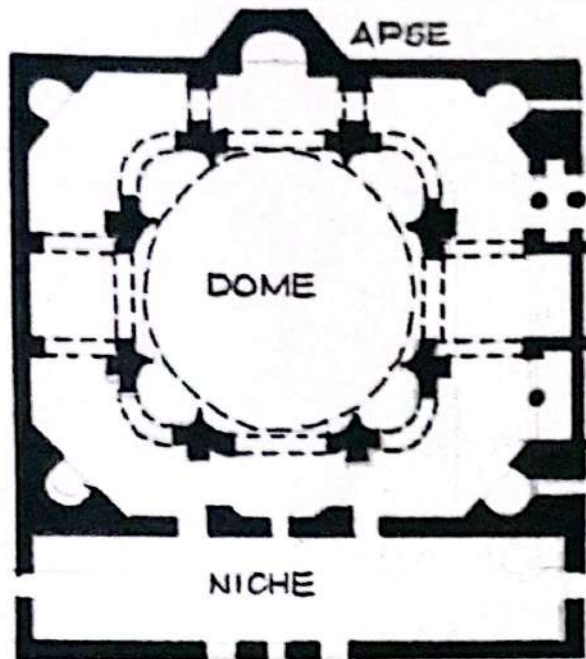


FIGURE 96.1: FLOOR PLAN OF THE CHURCH OF STG. SERGIUS & BACCHUS.

FIGURE 96.2: SECTION PLAN OF THE DOME

CHURCH OF ST. IRENE



FIGURE 97: CHURCH OF ST. IRENE OR HAGIA IRENE.

CONSTANTINOPLE, BYZANTIUM.

- OLDEST KNOWN CHURCH IN BYZANTIUM AND THE ONLY CHURCH THAT WAS NOT CONVERTED INTO A MOSQUE.
- LOCATED IN PRESENT DAY ISTANBUL, TURKEY. BUILT IN 532 AD BY EMPEROR JUSTINIAN.
- USED IONIC COLUMNS WITH THE EMPEROR'S MONOGRAM AS ONE OF THE ORNAMENT.
- REBUILT IN 740 AD AND SEVERAL TIMES LATER.

STATUS: CURRENTLY A MUSEUM LISTED AS UNESCO WORLD HERITAGE SITE.

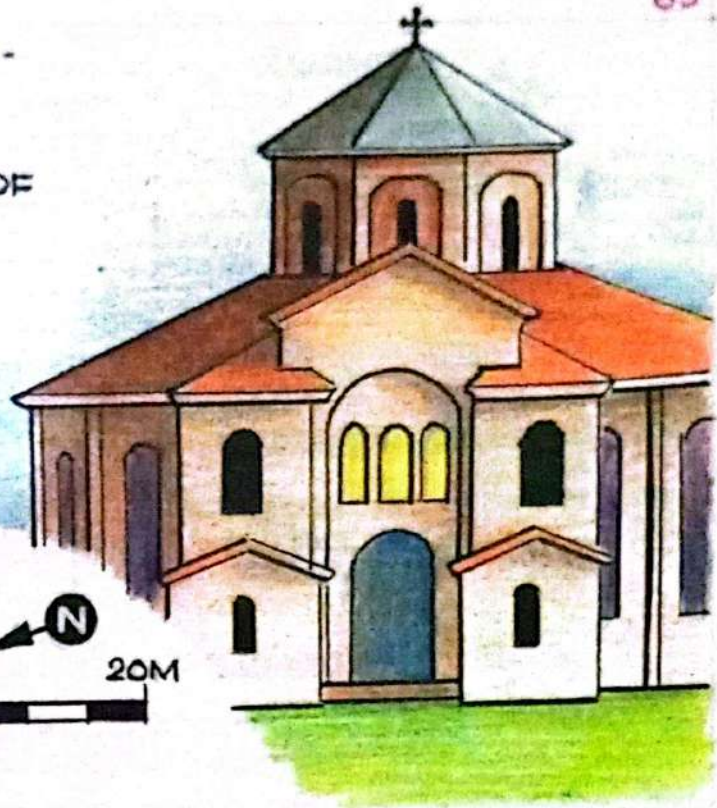
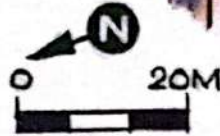
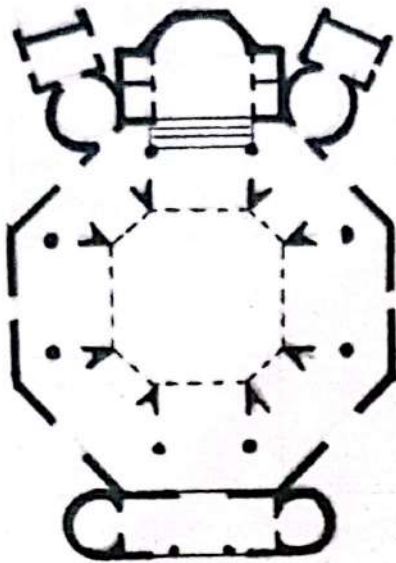
CHURCH OF ST. VITALE RAVENNA, ITALY.

- A CATHOLIC CHURCH BUILT BY JUSTINIAN I IN 527 AD.
- OCTAGONAL IN PLAN, AN INNER OCTAGON OF 30 FT BEING INSCRIBED BY AN OUTER ONE OF 110 FT. BIG.
- THE APSIDAL CHANCEL OPENS FROM THE INNER OCTAGON, BY A SQUARE BAY CUTTING THROUGH THE OUTER AISLE.

STATUS: LISTED AS UNESCO WORLD HERITAGE SITE.

FIGURE 98.1: FRONT ELEVATION OF THE CHURCH OF ST. VITALE.

FIGURE 98.2: FLOOR PLAN OF THE CHURCH OF ST. VITALE.



CHURCH OF ST. MARK VENICE, ITALY

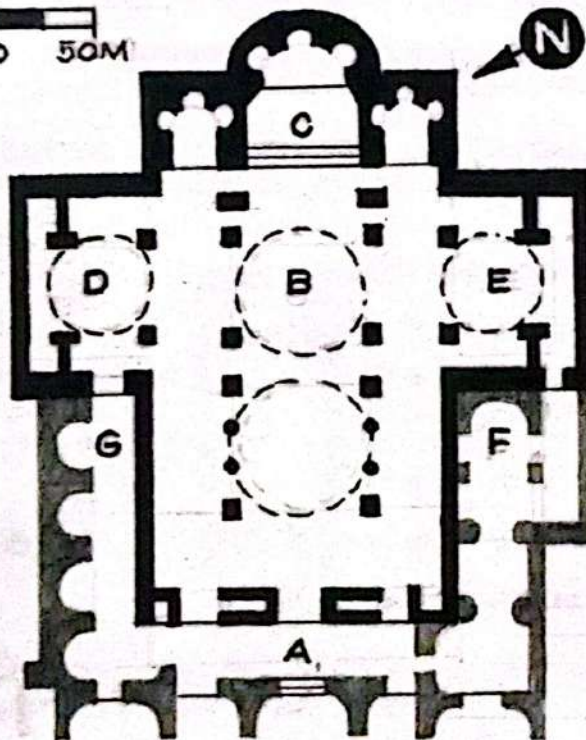
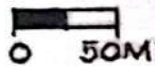


FIGURE 99: FLOOR PLAN OF THE BASILICA OF ST. MARK.

- ERECTED BY DOGE GIOVANNI PARTICIPAZIO IN 836 AD AS A CHURCH DEDICATED TO ST. MARK.

- ARCHITECTURAL STYLES APPLIED:

1. BYZANTINE (ORIGINAL)
2. ROMANESQUE
3. GOTHIC (1063 AD RECONSTRUCTION).

- MARBLE MOSAICS IN THE CHURCH INTERIOR WERE ADDED IN 1100-1350 AD.

- PLAN IS IN THE FORM OF GREEK CROSS OF EQUAL ARMS.

STATUS: EVOLVED INTO A BASILICA SINCE 1807 AD.

PARTS:

- | | |
|---------------------|---------------|
| A. NARTHEX | D. LEFT WING |
| B. THE GREEK CROSS | E. RIGHT WING |
| C. THE HIGHER ALTAR | F. BAPTISTERY |
| | G. MATRONEUM. |

CHURCH OF THE HOLY APOSTLES CONSTANTINOPLE, BYZANTIUM

- AN EASTERN ORTHODOX CHURCH OF THE 12 HOLY APOSTLES BUILT IN 330 AD IN ORDER OF EMPEROR CONSTANTINE I.
- REBUILT BY EMPEROR JUSTINIAN I IN 550 AD. ARCHITECTS WERE:
 1. ANTHEMIUS OF TRALLES
 2. ISIDORUS OF MILETUS

STATUS: MISSING. DEMOLISHED IN 1461 AD BY THE OTTOMAN ATTATURKS TO MAKE WAY WITH THE MOSQUE SOĞUKSU CAMII.

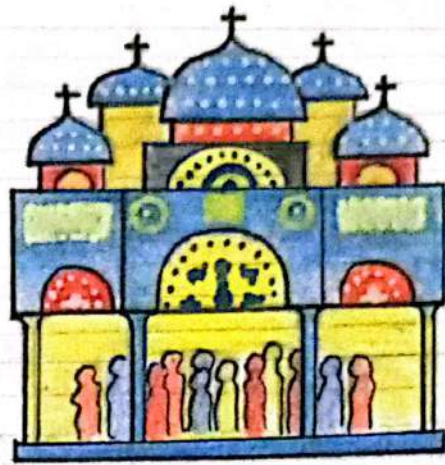


FIGURE 100: A 1208 AD DEPICTION OF THE CHURCH OF THE HOLY APOSTLES.

CHURCH OF NATIVITY BETHLEHEM, PALESTINE

- COMMISSIONED BY EMPEROR CONSTANTINE IN 326 AD SHORTLY AFTER VISITING THE VILLAGE OF BETHLEHEM.
- GROUNDBREAKING IN 326 AD, OPENED IN 333 AD, AND COMPLETED IN 565 AD.
- A CHURCH DEDICATED TO THE PLACE WHERE JESUS CHRIST WAS BORN ON CHRISTMAS DAY, AROUND 4 BCE.
- INTEGRATED AS A BASILICA BY EMPEROR JUSTINIAN I IN 527 AD; ADDED THE NARTHEX AND PORCH.

STATUS: UNESCO WORLD HERITAGE SITE, UNDER THE NATION OF PALESTINE SINCE 2012.

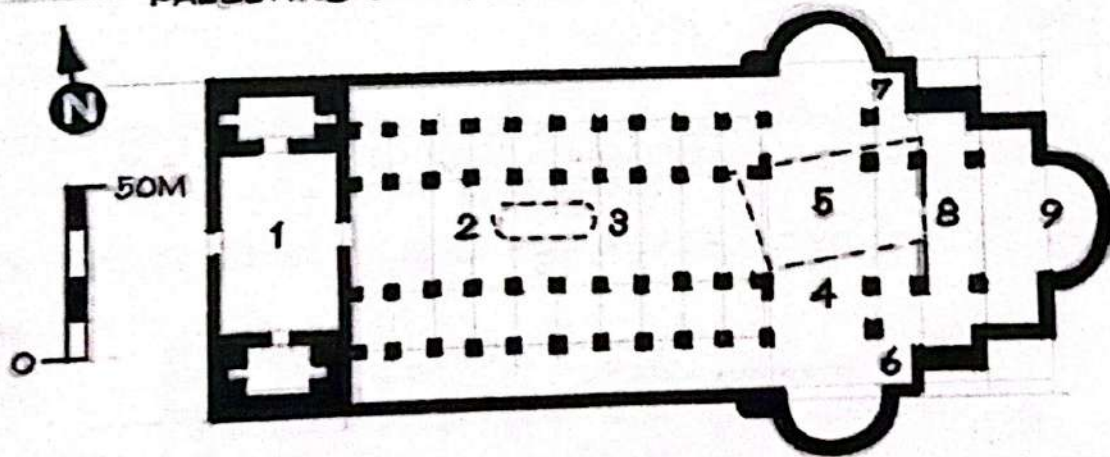


FIGURE 101: FLOOR PLAN OF THE CHURCH OF NATIVITY.

PARTS:

- | | | |
|--------------------|------------------------|-----------------------------|
| 1. NARTHEX | 4. GROTTO OF NATIVITY | 6. ALTAR OF CIRCUMCISION. |
| 2. NAVE | 5. ALTAR OF THE MANGER | 7. ALTAR OF THE THREE KINGS |
| 3. MOSAIC PAVEMENT | | 8. ICONOSTASIS |
| | | 9. HIGH ALTAR. |

GELATI MONASTERY MOTSAMETA, GEORGIA

A MONASTERY IS A BUILDING WHERE MONKS AND NUNS LIVE IN GROUP OR ALONE TO DO RELIGIOUS WORKS.

- BUILT IN 1106 AD BY KING DAVID IV OF GEORGIA AS A MONASTIC EDUCATIONAL CENTER.
- ONE OF THE FIRST MONASTERIES IN GEORGIA.

STATUS: CURRENTLY CLOSED FOR REHABILITATION AS OF 2023.

LISTED AS ONE OF THE UNESCO WORLD HERITAGE SITE IN GEORGIA.

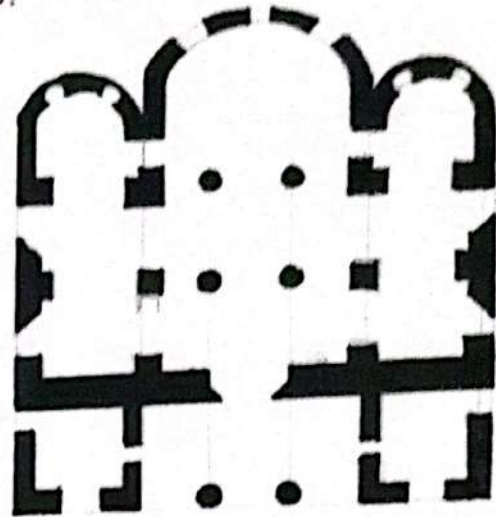


FIGURE 102: FLOOR PLAN OF THE GELATI MONASTERY.

HAGIA SOPHIA CONSTANTINOPLE, BYZANTIUM

- "HAGIA SOPHIA" MEANS "DIVINE WISDOM"
- BUILT BY THE ORDER OF JUSTINIAN IN 532 AD. THE SITE OF TWO SUCCESSIVE CHURCHES OF THE SAME NAME.
- WOODEN-ROOFED BASILICA — ERECTED BY CONSTANTINE I (333 AD)
- CHURCH ERECTED BY THEODOSIUS (380 AD)
- ARCHITECTS WERE ANTHEMIUS OF TRALLES AND ISODORUS OF MILETUS.

STATUS: CONVERTED INTO A MOSQUE AFTER THE FALL OF CONSTANTINOPLE IN 1453. BECAME A MUSEUM IN 1935, BUT REDESIGNATED AS A MOSQUE IN 2020.

SEE FIGURE 93 ON PAGE 80 FOR PERSPECTIVE REFERENCES.

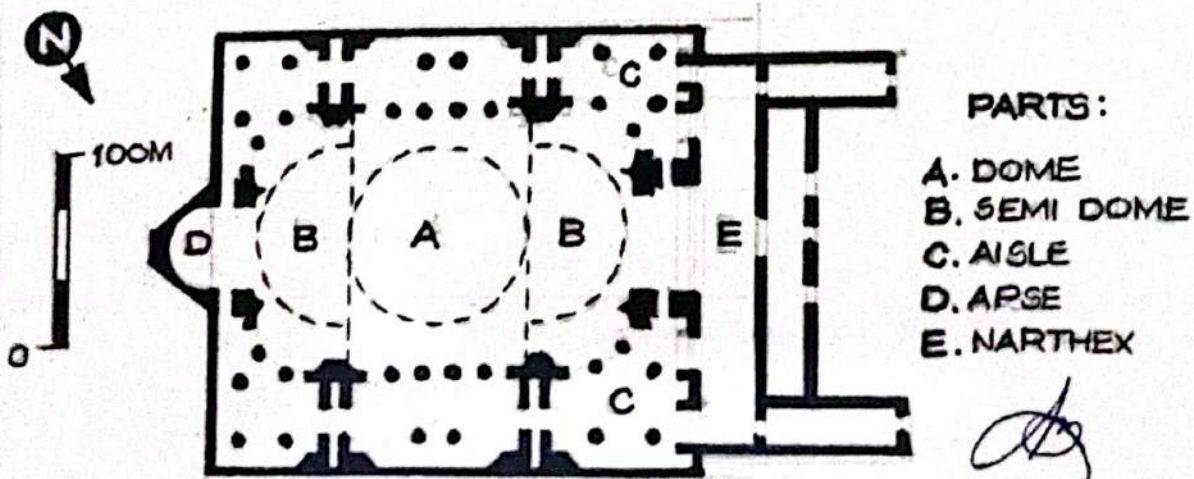


FIGURE 103: FLOOR PLAN OF HAGIA SOPHIA.